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LANDSCAPE ARCHITECTURE AS APPLIED TO HOSPITAL GROUNDS

BY HERBERT J. KELLAWAY, LANDSCAPE ARCHITECT, BOSTON

DURING the past twenty-five years a great change has taken place in the mind of the public regarding our hospitals. While this change is due primarily to advances made in the science of medicine and surgery, attractive buildings and well developed grounds have played an important part. The readers of THE MODERN HOSPITAL may be interested to note some of the possibilities of an unpromising beginning, and so for this article I have selected a specific case,—an institution with which I have been intimately connected in my own home city.

When I was called into conference some twelve or fifteen years ago, the Newton Hospital at Newton, Mass., had been established for more than twenty-five years and many of the buildings had been erected. In the earlier days, institutions of this kind were recognized as a necessity but were not welcome as neighbors. Desirable sites could not be easily secured and in fact many features which today are considered essentials were not then recognized. Fortunately, three most important things were demanded—light, air and dry soil. The site selected—an old farm on the outskirts of the city—had little to commend itself except these three qualifications.

Landscape gardening makes the entrance to Newton Hospital a lure to the passerby.

The first buildings were constructed of wood and consisted of a ward for men and an administration building. As the need of the community increased other buildings were added and, in accordance with the best thought of the time, were constructed as separate units connected by long corridors. The buildings had been placed on a hillside and, from time to time, excavations had been made to secure additional room, thus leaving high unsightly gravel banks as the only outlook from some of the wards.

When I was first consulted, additional land had been donated to the hospital and a large building was to be erected by the same donor. Surveys were first made and a topographical map showing the contour of the land and the location of existing buildings was prepared. With this map as a basis, a comprehensive plan embodying present changes and future development was made. The vision in the mind of the landscape architect was of a park, with lawns, trees and flowering shrubs, available to convalescent patients as a rest spot from the tedium of hospital life and to the shut-ins as an outlook of such beauty as to divert the mind from internal meditation to external observation. There was also a vision of more homelike surroundings and a happier life for the nurses which would be reflected upon the patients entrusted to their care. Some of the details were not deemed advisable in a gen-

Trees and shrubs convert the hospital grounds into a veritable park, verdant in summer and not entirely barren and cheerless in winter.

eral hospital but the important features were all carried out.

The study made it clear that many objectionable features, such as wide steep driveways and walks, large gravel areas and other unsightly objects, should be eliminated. Provision was made for open lawns bounded by trees and shrubbery which were not only attractive but which served as a screen from the street. The lines of the buildings were softened by the planting of shrubbery and vines. Walks and drives were made of easier grades and areas which were gravel wastes were turned into lawns. The barren banks which were too steep to be treated in this way were planted with low growing shrubs and running vines. Depressions were gradually filled and the uneven surface was changed into graceful curves. A scheme for lighting the grounds was also developed; poles were removed and the electric light and telephones wires were placed underground.

As in many such operations there was a shortage of loam and topsoil necessary for the growth of grass or plant life. Every particle was carefully saved even to the natural yellow loam which is usually found below the black top in gravelly and sandy regions.

Flowers and Trees Affect Mood

The study of individual trees for shade and effect and the arrangement of the masses of shrubbery were all a part of the general plan. It was decided to use as far as possible hardy kinds of trees and shrubs which had been tested out by experience in similar locations. One of the most difficult problems was to cover a gravel hill which had been partially removed to give room for the new building. To cover this with loam was too expensive and so out of the question. A little of the topsoil was scraped back to cover the sand in order to protect it from the driving winds. There was not enough to give sufficient soil even for grass and so white pines were planted in small holes filled with loam. The trees were then mulched in order to retain the necessary moisture. A rainy day was chosen for the planting with the result that but few of the two hundred trees were lost.

The new building, "Founders Memorial," was constructed of brick and by force of necessity was faced toward the north. Between this building and the driveway, rhododendrons of suitable colors and other evergreen shrubs were used. As a part of the general scheme there were added, from time to time, flowering trees and shrubs which had been chosen because of their natural beauty and grace. Any evergreen tree which would tend to suggest a cemetery was eliminated and weeping specimens were absolutely discarded, for even plants can give rise to depressing thoughts while flowers such as roses, syringa, lilacs, spiraea, wigelia, privet, honeysuckle and viburnum are a source of pleasure. The plants in each bed were so arranged as to give something which would be in bloom all the season. Even berried plants were chosen to add a little brightness to winter life. These included barberries, the Japanese and wild rose and hawthorne trees. For the low growing blooming plants peonies and phlox were chosen; and to provide early spring flowers crocus and narcissus bulbs were planted in the grass borders of the shrub beds. As bird life is always an interesting study boxes were proposed to attract colonies to the grounds.

Mortuary is Concealed

In the early days the mortuary with all its depressing effect had been erected on the grounds adjacent to several of the wards. The contour of the land which had been an objection in other cases lent itself most admirably to the correction of this defect. A new brick building was erected between two low hills. The entrance to the mort-

By winding wooded paths the pedestrian traverses the grounds.

uary and chapel was made on a lower level reached by a driveway behind one of the hills and outside of the main hospital grounds. On the higher level the driveway within the grounds leads to the ambulance house which is the second story of the mortuary building. Nothing but the ambulance house can be seen from the hospital but there is a direct connection through an underground corridor.

The buildings used as a home for the nurses occupy the highest part of the grounds and were reached by a wide steep driveway. This driveway was made of an easier grade and was narrowed in order to enlarge the lawns and to reduce the wide gravel covered surface.

Change is Complete

Substantial buildings had been erected on quarantined grounds for contagious diseases, but no effort had been made to beautify the surroundings. Here too, the large gravel area was covered with loam and laid out in attractive lawns with low growing shrubs. Between the buildings for contagious diseases and the nurses' home a level spot was utilized as a tennis court for the nurses. In winter time the court is flooded and a small skating rink thereby provided. The wire nets around the court serve as an admirable support for climbing roses and there is perhaps no more beautiful spot on the grounds than this court when the roses are in full bloom.

One who passes through the grounds today can hardly realize that the old farm of 1885 could have been developed into the beautiful grounds as they appear today. Changes which have been made can hardly be expressed in words and must be seen to be appreciated. It is so natural in its treatment that only by retrospective comparison could one realize that the early dream had come true. Photographs taken in the earlier days when compared with recent photographs of interesting outlooks will tell a graphic story of the change.

Great lawns between buildings invite convalescents to speedy recovery.

The trim utilitarian architecture of the ambulance house gives no hint to patients in the buildings across the green that it conceals a morgue.

NURSING PERSONNEL OF TYPICAL WARD

One superintendent of a large hospital has prepared the following table which represents the percentage of coverage of a typical ward with nursing personnel:

Personnel of Ward—
Head nurse.
1 Senior.
4 Intermediates.
2 Night nurses.

Number of Patients—(22).
Ratio of patients to nurse established by hospital: 1 to 4, days; 1 to 12, nights.

Hours of coverage, various positions—

Head nurse—	12 hours	× 365 days	=	4,380 hours.
Senior—	12 hours	× 365 days	=	4,380 hours.
Intermediates—4	× 12 hours	× 365 days	=	17,520 hours.
Night nurse— 2	× 12 hours	× 365 days	=	8,760 hours.

Actual performance—

Head nurse—off duty:

3 hours per day × 365 days	=	1,095 hrs.
2½ week days off per month × 12 hrs. × 12 months	=	360 hrs.
2½ Sundays off per month × 12 hrs. × 12 months	=	360 hrs.
1 hour for meals × 365 days	=	365 hrs.
1 month vacation × 12 hours × 31 days	=	372 hrs.
		2,552 hrs.

Position calls for 4,380 hours of service: off duty 2,552 hours; on duty 1,828 hours—or 41 per cent coverage.

Senior nurse—off duty:

3 hours per day × 365 days	=	1,095 hrs.
6½ hrs. class work per week × 4 weeks × 8 months	=	208 hrs.
1 full day per week off duty × 12 hours × 52 weeks	=	624 hrs.
1 hour for meals × 365 days	=	365 hrs.
1 month vacation × 12 hours × 31 days	=	372 hrs.
		2,664 hrs.

Position calls for 4,380 hours of service; on duty 1,716 hours—or 39 per cent.

Intermediates—Off duty:

4 × 3 hours per day × 365 days	=	4,380 hrs.
4 × 6 hours class work × 4 weeks × 8 months	=	768 hrs.
4 × 1 full day per week × 12 hours × 52 weeks	=	2,496 hrs.
4 × 1 hour for meals × 365 days	=	1,460 hrs.
4 × 1 month vacation × 12 hours × 31 days	=	1,488 hrs.
		10,592 hrs.

Position calls for 17,520 hours; on duty 6,928 hours—or 39 per cent.

Night nurses—Off duty:

2 × 3½ hours per day × 365 days	=	2,555 hrs.
2 × 1 hour for meals × 365 days	=	730 hrs.
2½ days × 12 hours × 12 months	=	360 hrs.
2 × 1 month vacation × 12 hours × 31 days	=	744 hrs.
		4,389 hrs.

Position calls for 8,760 hours of service; on duty 4,371 hours—or 49 per cent.

Conclusion—
Head nurse cannot be considered in computing ratio of nurses to patients. Assuming that ratio as given is correct, the number of day nursing hours on a 90 per cent occupancy of ward is 5 nurses × 12 hours × 365 days or 21,900 hours. Night nursing hours are 2 × 12 × 365 days or 8,760 hours.

	Position	Covered	Per cent of Coverage	Ratio for Comp. Coverage
Head nurse	4,380 hrs.	1,828 hrs.	41%	2.44%
Day nurse	21,900 hrs.	8,644 hrs.	39%	2.59%
Night nurses ...	8,760 hrs.	4,371 hrs.	49%	2.04%

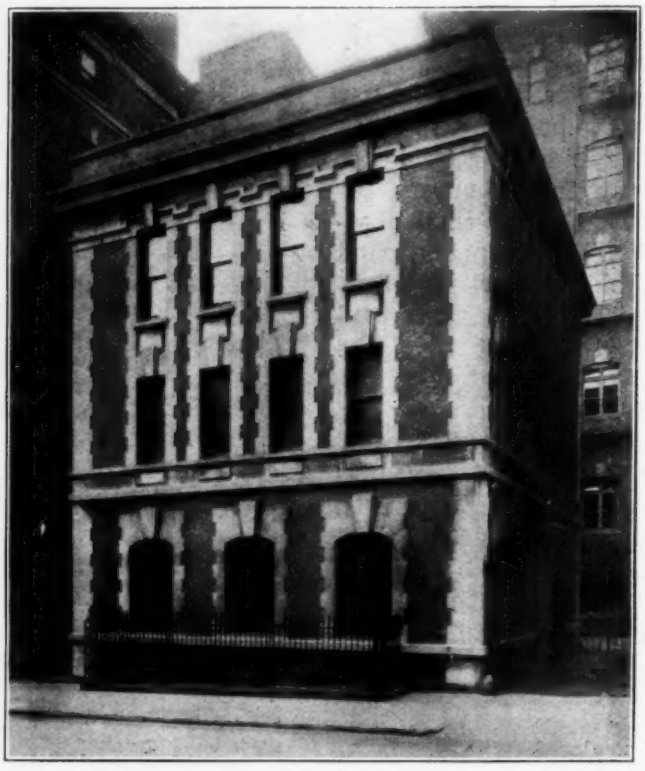
"People who think outside their heads, the whole process of whose thought appears, like Homer's, in the art of secretion, who tell everything that led them towards this conclusion and away from that, ought never to be with the sick."—Florence Nightingale.

SCHOOL OF NURSING WITH A REAL SCHOOL HOUSE

By ELIZABETH A. GREENER, Superintendent of Nurses, Mount Sinai Hospital, New York City

WHO ever heard of such a thing as a real school house for student nurses? Where are those pessimists who once invented that terrible bugaboo of the over-trained nurse which nearly frightened some of our poor timid medical brothers to death? And who dares today to say that nursing education is a myth and a failure?

So far as can be ascertained, Mount Sinai Hospital, New York City, is the first institution in this country to set aside and equip a substantial building which is used solely for the educational needs of a school of nursing. Indeed two splendid buildings, formerly used for hospital purposes, have been turned over to meet the immediate needs of the training school, one as a school building, the other as a home for graduate assistants. The close proximity of these two buildings to the main nurses' home is especially advantageous.



Nurses' Educational Building.

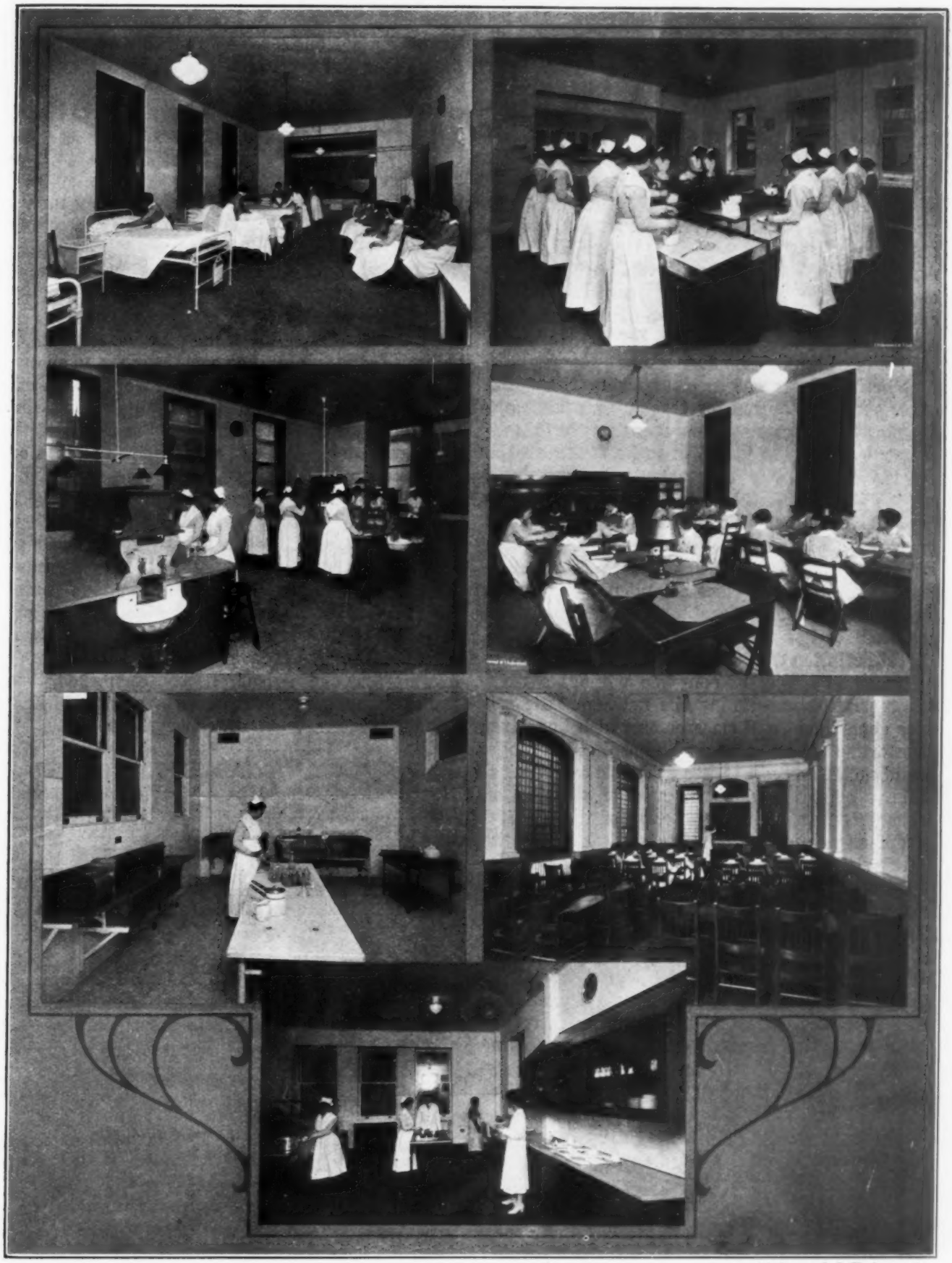
The structure which has been remodeled and equipped as a school was originally designed for research laboratory purposes (the hospital laboratory, by the way, has since been provided with a much larger building), and is a three story structure of stone and brick with large sunshiny rooms, high ceilings and tile or terrazzo floors throughout. It could hardly have been improved upon had it been originally intended for the purpose to which it has been adapted. The approach is through a sunny corridor with windows on either side, leading directly from the nurses' home.

The first floor is divided into two large lecture or class rooms, each of which can accommodate groups of from fifty to seventy-five students. There is a dignified entrance hall, with a small reception room at one side. One of the lecture rooms is devoted largely to the work of the instructor in sciences and is fitted with skeleton, manikin, Froshe charts, blackboards, balopticon and screen for the projection of pictures, and other useful class room equipment. The other is a more simple room, dignified in appearance and beautifully finished in oak with soft-colored stained glass windows. This is used for more formal purposes, largely for lectures given by the attending staff, etc. These lecture rooms are separated by the reception hall and vestibule, the main doors of which are beautifully decorated with heavy grilles.

The second floor is devoted largely to the use of the instructor in sciences. At the head of the stairs to the right is the study, containing a reference library of from three to four hundred volumes, all of which have been selected with direct reference to the needs of the school of nursing. Study tables with shaded lights are furnished for the use of the students. The instructor has a comfortable office across the hall which makes it possible for her to keep in close touch with students using this room and to direct their activities properly. In her office is all necessary equipment for efficient work, including, among other things, typewriter, desk, files, mimeograph outfit, large dictionary on standard, desk telephone, etc. Across the front of this floor is a well-lighted science laboratory, measuring 16-32 feet, with individual equipment for a group of twelve students. Opening from this science laboratory are two small rooms, one of which will be developed later for special scientific work. The other is used by the instructor as a special store and stock room. A lavatory finished in Italian marble is conveniently placed on this floor, and there is a sanitary drinking fountain at the left side of the corridor.

To the average visitor, the third floor probably presents the most attractive appearance of all, as

GLIMPSES WITHIN THE NURSES' SCHOOL HOUSE AT MT. SINAI HOSPITAL



Underwood & Underwood.

the entire front of the building is developed into what appears to be a beautiful, sunshiny ward with five adult beds, also a crib and a bassinette for use in teaching children's nursing. Practically everything used on the ward is to be found in this beautiful demonstration room for student nurses. A utility room opens from one corner and this, too, is fitted up in every particular to duplicate a utility room in the general hospital, so that the nurse may be taught the use and care of the many articles that she will need there. A stretcher, complete surgical dressing carriage, and three Chase dolls are also furnished for this department. Opening from the left of the demonstration room are two supply rooms fitted with closets, one modeled after the linen rooms in the wards, the other a special supply closet in which all material and equipment used for treatments may be found, such as special baskets, trays, and other articles required for teaching purposes are kept in these closets and in every case they duplicate the equipment which is to be found on the wards. Behind the demonstration room is a smaller classroom used solely for teaching bandaging and for keeping all necessary supplies for that purpose. Across the hall from the bandage room is the office of the instructor of practical nursing. One side of her office is built up solidly with large supply closets for keeping extra material required for her work.

A description of our nurses' educational equipment would hardly be complete without a word of description concerning the new domestic science department and classrooms which have just been opened in one of the new hospital buildings. It did not seem to be either desirable or practical to have classes in domestic science, dietetics or cookery conducted in any section of the hospital except one closely and intimately related to the actual dietary center where the instructor of dietetics could conveniently supervise all such work without being taken too far away from her own department. These class rooms are in a section of the new children's pavilion. One is a domestic science or cookery class room, fitted with individual equipment for twelve students, another a class room for theory. The milk room is on the far side of the domestic science classroom and the large special diet kitchen of the general hospital just across the hall. The dietitian's office is at the end of this suite and commands the whole department. All the rooms are bright and beautiful, on the south side of the building where they have sunshine all day long.

The second building, which was recently turned over to the training school, has been remodeled as a residence for the sole use of a group of supervisors and head nurses. Twenty-two officials can be accommodated in this building and many of the number have rooms with individual baths. The student nurses promptly named this building "The White House" when they discovered that the assistants were to live there.

In addition to three suites of bedroom and bath on the first floor of this building are two small, cosy reception rooms in which the nurses have the privilege of receiving their friends. There are also a wonderfully equipped laundry and kitchenette, and the homelike atmosphere makes the nurses feel that they are actually keeping house in their own home. The building, which is a four-story one with different sizes and types of rooms, makes it possible suitably to accommodate the different groups which it houses. Like the educational building, it is of brick and stone; ceilings are high and the rooms bright and sunny.

On the fourth floor is a large front room, extending the full width of the building, with windows on three sides, which is used as a recreation room or sun parlor. In this room, in addition to the regular furnishings, are a victrola, sewing machine, card tables, etc. Nothing has ever been done for the graduate nurses of the school that they have appreciated so greatly or enjoyed so much as the use of this building which they have entirely to themselves. It gives them opportunity for rest and freedom away from the constant observation of the student group, a real home where they may be free from constraint and where, as one member of the group naively remarked, they could either burn toast or cook onions without unpleasant comments or consequences.

STAFF ONLY MAY ADMINISTER RADIUM

Only staff physicians at the Mayo Clinic, Rochester, Minn., are allowed to apply radium. Dr. H. H. Bowing, head of the section of radium and x-ray therapy of the clinic, believes such a ruling absolutely essential.

"The many discouraging reports circulated today regarding radium therapy, in all likelihood, are due to the negligence of the physician in charge as well as to the many physicians who buy small quantities of radium and apply it without the necessary experience," says Dr. Bowing. "It would be folly for a medical hospital to purchase a complete set of surgical instruments and equip an operating room and then ask the staff to practice surgery. It is only slightly less absurd in radium therapy. The physician who purchases radium is given to believe that the art of its application can be acquired in a short time."

Dr. Bowing believes it essential for the proper administration of radium that a physician on the hospital staff be designated as responsible for every phase of its therapeutic application. Only through consultations with other members of the staff should treatments be given. The physician should be privileged to study at various centers where large quantities of radium are used.

The Curie Hospital in Rochester contains thirty beds. It has more than two grams of radium and four standard x-ray machines for therapeutic purposes. The nursing staff removes the radium and prepares the applicators.

CITY OF MANNHEIM CONSTRUCTS THOUSAND BED HOSPITAL

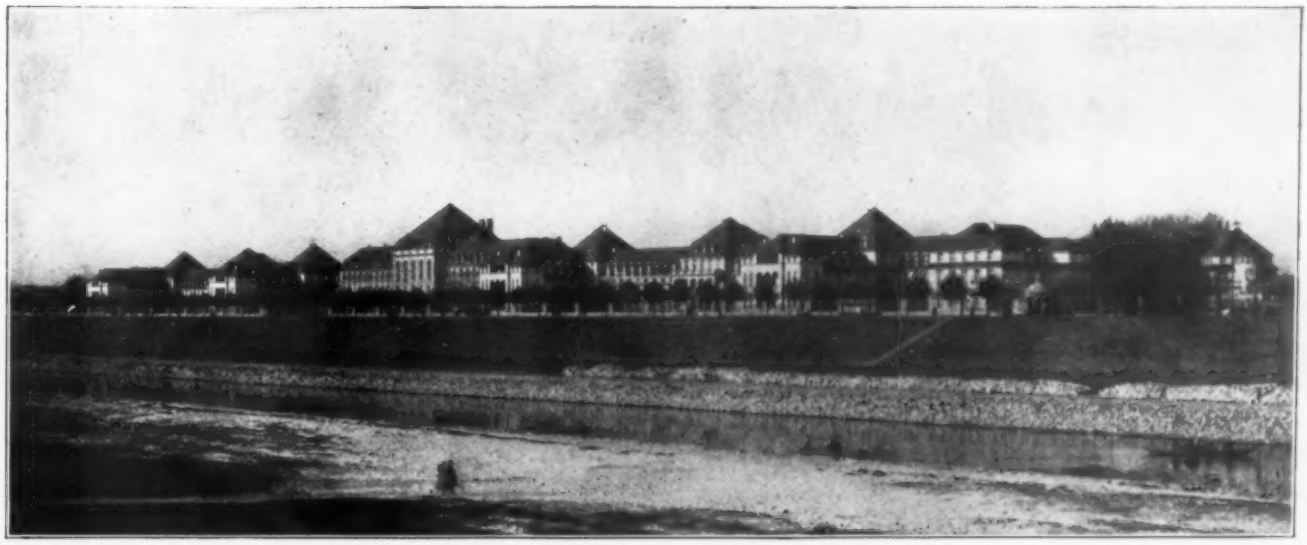
By CITY ARCHITECT PERREY, Mannheim, Germany

DURING the first two decades of this century, hospital construction in Germany passed through an important stage of development, characterized by a fundamental change of conception corresponding to the modified ideas gaining ascendancy in the various fields of medical science.

In the middle of the last century, the corridor system was regarded as the most suitable for hospitals; all the wards and subsidiary rooms, that is, opened into common corridors. In large plants in which it was found impracticable to have all the rooms in a single building, several separate structures connected by corridors were erected. The main characteristic of this system was thus a direct or indirect connection of the atmosphere of all the rooms. The advantages of such plants were: the avoidance of unnecessarily long distances; protection of the patients and the personnel against inclement weather in passing to and fro within the institution; and ease and rapidity in caring for patients and supplying their needs. The main disadvantage was found to lie in the danger of transmitting infectious diseases.

Unit System Supplants Corridor

The outstanding progress of medical science in this particular field led, toward the end of the nineteenth century, to the rejection of the corridor system and the adoption of a system directly opposed to it; namely, a complete breaking up of an institution into a large number of entirely disconnected buildings or units. As the most perfect example of the new system I may mention the Hamburg-Eppendorf hospital, which was completed in 1889 and contains more than seventy independent, disconnected units. The evils resulting from the transmission of infectious diseases were entirely abolished by this system. But in their place a great number of other evils soon made themselves manifest. As the various units composing such a building complex had to be erected at a sufficient distance apart to secure proper lighting and an adequate supply of air, it was found that they covered an unusually large extent of territory. Thus the distances that the patients, and more particularly the attending personnel, had to traverse were much increased. The hospital personnel, and especially the physicians, were obliged to cross in the open from one building to another, thereby exposing themselves to all kinds of weather, during our often very severe winters, and running great risk of taking cold. Another difficulty arose from the inconvenience of providing the patients with warm meals. At the beginning of this century, the conviction was reached that it was not necessary to distribute the patients among so many buildings; that, moreover, the proper solution would doubtless be to unite the advantages of the two systems and to apply the corridor system to all non-infectious diseases and the pavilion system to the infectious diseases. And since the number of patients with infectious diseases



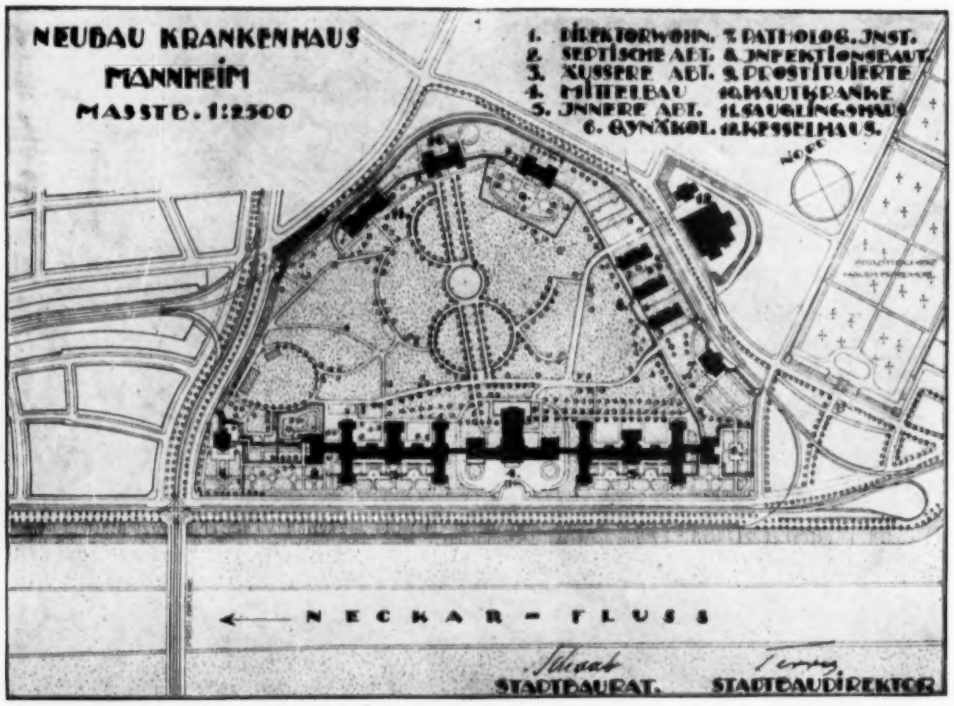
A comprehensive view of the Mannheim Hospital.

proved to be in the minority, the application of this compromise system made it possible to house the greater part of the patients in buildings of several stories, in which the corridor system was reestablished, while a small number of pavilions were erected for patients with infectious diseases and for other patients whose isolation for various reasons seemed desirable.

Then, again, the conflicting views with regard to limitations in the size of hospitals became clarified, and the opinion gained ground that it was not advisable to build hospitals of immense size, since the difficulties of a uniform management from an administrative and technical point of view, as well as from a medical standpoint, are thus vastly enhanced. Consequently, in recent hospital construction the number of beds in a hospital has not usually exceeded 1,500, in contrast with the institutions founded toward the end of last century, containing from 2,000 to 2,500 beds, or even 4,000 beds, as is the case with the Heil- und Pflege-Anstalt located on the Kahlenberg in Vienna.

Mannheim Hospital in Park

This was the state of affairs, as regards hospital construction, when the city of Mannheim in 1908 took the preliminary steps in connection with the erection of a large new hospital to contain 1,000 beds, with a possible increase to 1,300 or 1,400 beds. The question of a suitable site for such an institution is a very important one. In Germany it is generally assumed that at least 100 square meters of building space should be allowed for each hospital bed, and, when possible, the endeavor is made to go beyond this norm. In Mannheim it proved possible to utilize for this purpose a large park with some fine old trees. The park, containing 172,020 square meters, is immediately contiguous to the Neckar, a branch of the Rhine, and is only one and a half kilometers from the center of the city. It fronts the south and the Neckar valley for a distance of 600 meters. The broad river front and the size of the park made it possible to arrange the buildings in such a manner that privately owned buildings could only be erected at considerable distances from them, which is a very important question in selecting a site for a hospital. Of no less importance in the choice of a site for a hospital to be erected in a manufacturing city is the prevailing direction of the winds. The hospital must be so located that smoke and injurious industrial gases do not reach the premises. This prerequisite was also secured for the Mannheim hospital grounds. In keeping with the abovementioned features of modern hospital construction and taking account of the location and shape of the building site, a plan for the arrangement of the buildings was worked out and is shown above. On the river front, facing the south, are the three main buildings, connected with each



Plan of the Mannheim Hospital.

1. Residence of the superintendent.
2. Department for septic cases.
3. Department for external diseases.
4. Main building.
5. Department for internal diseases.
6. Gynecologic department.
7. Pathologic institute.
8. Pavilions for infectious diseases.
9. Pavilion for prostitutes.
10. Pavilion for cutaneous diseases.
11. Infants' pavilion.
12. Boiler room.

other by corridors—some open, some closed. The central building contains no wards; but only the offices of the administration department and such rooms as are necessary for the handling of patients. To specify, these are: (1) admitting rooms; (2) main entrance through which all must pass who enter or leave the hospital; (3) administration department; (4) pharmacy; (5) main kitchen; (6) main bath; (7) room for holding meetings, various ceremonies and religious worship; (8) entertainment hall and apartments for nurses; (9) casino and apartments of physicians, and (10) a number of well-arranged apartments for married employes.

The main entrance is an imposing one

Adjoining this central building on the left and right are the two main buildings for internal and external diseases. Both buildings are three stories high, with wards of varying size opening into long corridors. The wards consist, in part, of rooms containing from one to seven beds, all having southern exposure; in part of larger rooms containing sixteen beds each, with windows on both sides toward the east and the west. The laboratories, examination rooms, operating rooms and bath rooms are located on the north side of the corridors. In wing additions adjoining these two main buildings are certain special wards; next to the department of external diseases is the ward for septic cases and for eye and ear patients, and next to the department for internal diseases is the ward devoted to gynecology. By this plan it was possible to distribute the majority of the beds throughout these two main buildings, there being 742 beds in 160 rooms, all intended for patients with non-infectious diseases. For infectious and other special cases the pavilion system is employed.

In order not to destroy the uniformity of the large park, which will constitute a pleasing feature of the new hospital, the pavilions were located at the rear edge of the park, there being four one-story pavilions (with projecting attic story), for measles, scarlet fever, diphtheria and whooping cough, respectively. For the present, only three of these pavilions will be erected. There is a special pavilion for prostitutes, and another for scabies and venereal disease cases in men. There have been added a pavilion for sick infants and a laboratory of pathology with dissecting rooms. The morgue and undertaking rooms complete the equipment.

The residence of the superintendent is placed at the western end of the park, far removed from the hospital buildings. The boiler rooms, laundry and disinfecting establishment are located off to one side (toward the east), so that the smoke from the chimney does not affect the hospital buildings or the park grounds.

In the above-mentioned pavilions there are 253 beds, distributed through sixty-three wards; in addition, the special pavilion for infants has thirty wards and 116 beds, making altogether 253 wards with 1,111 beds. Certain provisions are made for extensions by finishing off attic rooms and by wing additions. In this manner, space for sixty-one more wards with 291 additional beds may be secured, so that, after the whole plan of the institution has been developed, there will be 314 wards with 1,402 beds. According to present views that is the maximal number of beds a modern hospital should have.

From the large number of wards in comparison with the number of rooms, it will be seen that an endeavor has been made to avoid housing too many patients in one ward. The ideal would probably be to have no more than one or two beds in a room, but unfortunately financial restrictions prevent the realization of such an ideal for the present, for it has been noted from actual computations that building costs increase very rapidly with the decrease of the number of beds in a ward. The personal expense to patients would, of course, have to be materially increased with the decrease in the size of the wards. For these reasons, wards with from thirty-two to forty beds were formerly built in Germany, but in the institutions recently built this idea has been abandoned for the reason that such a huddling together of patients has come rightly to be regarded as ill advised. The plan adopted for our institution of having a large number of wards of varying size makes it possible to segregate the patients according to social status or from any other point of view.

Another important question, besides the size of the wards, is the method of housing the hospital

personnel. In the nature of things, it is necessary that, as far as possible, the personnel shall reside in the institution in order to be available at all times. The carrying out of this idea adds quite materially to the cost of modern institutions, especially since not only sleeping rooms for the personnel must be provided but also sitting rooms and entertainment halls. The skill of the architect is called sharply into play in order that certain parts of a building which are not suitable for patients but are otherwise unobjectionable may be utilized for these purposes. This idea has been carried out to the fullest extent in the Mannheim hospital. All the rooms in the rear overlooking the park, as well as all the attic rooms not needed for other purposes, are finished off for the personnel, and in this way sitting rooms and sleeping rooms for 367 persons were obtained. There are also many employes who live outside of the institution. The required personnel for our institution has been estimated to be 413. This seems a high figure, but it accords with the general estimate based on common experience. On an average, we figure in Germany on one member of the personnel to 2.54 patients, which includes of course the kitchen personnel and all those who are employed to keep the building clean. Many institutions go far beyond this estimate, employing at times one member of the personnel for every 1.52 patients.

Outstanding Features of Plan

Among the more important features of the institution, the following may be briefly mentioned:

In the central building is located one large main kitchen (147.18 square meters of floor space), with facilities for cooking with steam or gas. From here food is taken through the rear corridor to the lifts and thus transported to the twenty-four serving kitchens of the adjoining main buildings. Food for the pavilions for infectious diseases is carried on well isolated food trucks. Adjoining the main kitchen are the scullery, the pantry, the meat-cutting room and the large storage rooms; also numerous rooms for the personnel.

In another large room (230 square meters) in the central building is the department for roentgen-ray treatment. Over this is the main bath hall with facilities for therapeutic baths of all kinds. Owing to their central location, the roentgenographic department and the baths may be readily utilized by out-patients. In the building for external diseases, the operating rooms are worthy of attention. They face the north and have a floor space of 56.17 square meters. Between these two rooms is the large sterilizing room. In the operating rooms an equable temperature is assured by the distribution of the heating apparatus over the walls, ceiling and floor. The walls are perfectly smooth, being covered with glazed tile (size, 50x50 cm.). The operating rooms contain nothing besides the operating table and scrub-up sinks for the surgeons. Heating and illumination are from without. There is an additional operating room for septic patients in the department for septic cases. In the department for internal diseases, the laboratories, which are unusually large, are worth noting. Altogether, there are twenty-four rooms with 440 square meters floor space devoted to this purpose.

The ordinary ward with sixteen beds has double windows on both sides. Heated fresh air is brought in through the window recesses. The vitiated air is expelled by electric ventilators. Adjoining each operating room is an isolation room for turbulent or moribund patients; also a small examination room, a bath, lavatory, toilet and *loggia*.

Isolation is Complete

In planning the pavilions for infectious diseases, great importance was attached to preventing the patients from coming in contact with other persons. No one can enter them unless admitted by the nurse in charge. Food is handed in from outside. In the pavilion for scarlet-fever patients, in view of the marked contagiousness of the disease, a special disinfecting bath is prepared for patients who are dismissed. In one room, the patient lays aside his hospital garments when the bath is entered. After bathing he enters another room, where he puts on his disinfected street clothes. From this room he leaves the ward without coming in contact with other patients. The pavilion for sick infants awakens considerable interest attached to protecting the patients from drafts, and at the same time securing the opportunity of keeping the infants out in the sunshine when the weather is fair. The pavilion contains 116

The infants' pavilion is a five-story structure

The pavilions for infectious diseases are located at a distance from the other buildings

beds, which are disposed in groups of six. For each ward there is a bath room, and between the bath room and the ward there is an anteroom. The wards are separated from each other and also from the corridor by glass partitions, so that the wards are well lighted and can be easily surveyed. On the south front the front walls of the outside rooms of the upper stories are set back, thus providing space for terraces and balconies of great extent. These give the infants the benefit of fresh air and sunshine.

The space at my disposal will not permit me to describe in detail the technical arrangements, which are the best and the most complete that modern hospital construction affords. A detailed description must be reserved for a special article, but I will endeavor to sketch a few of the features. All the wards are heated by the hot water system; the rest of the rooms have low pressure steam heat. In addition there are also steam and hot water systems for general operations carried in kitchen, laboratories, baths, etc., as these are in use the whole year round. There is hot and cold water in almost all the rooms, and wherever needed there are gas connections, electric illumination, power current for other purposes, and low current for electric signals and bells. In all the buildings, there are electric bed, food, and passenger lifts, so that patients who cannot walk can be readily transported to any part of the building. All the connections are located in a tunnel, which extends around the whole tract. This is used also for the transportation of corpses.

The buildings are solidly constructed throughout. The ceilings, which are of iron and cement, are made sound-proof by thick layers of sand. All the floors are covered with linoleum, the walls being channeled out to allow the linoleum to extend up 13 cm. at the sides. As the corners of the rooms are also rounded out, there are no hollow corners in the wards that are so hard to keep clean. The serving kitchens, bath rooms and some others have terrazzo floors. Bathtubs and lavatory fixtures are made of fire-clay. Staircases are of artificial stone, likewise with rounded-out corners. Smooth, veneered doors have been used, since panels tend to catch and hold the dust. The wardrobes are concealed in the walls for the same reason. As protection against the sun, sliding blinds are used. Venetian blinds and all similar arrangements were studiously avoided, as they catch the dust. A special type of toilet, the so-called *consolcloset*, has been installed. This toilet, when not in use, may be clapped back into the wall, affording a better opportunity of cleaning the floors. The lavatory arrangements for patients are peculiar. Detached wash bowls were decided upon. The bowls are numbered to avoid confusion, so that each patient may use only his own bowl. The bowls, when in use, are placed on consoles made of fire-clay. This arrangement lessens the chance of transmission of disease. For the same reason a type of steam dish-washing apparatus is used in the serving kitchens, in which boiling water may be utilized to sterilize the dishes. Surfaces of the wall that are subject to damage from water are covered with glazed wall-plates. For wall surfaces exposed to any unusual amount of wear, as along the staircases, a lead and oil paint was used. Otherwise, for the walls and ceilings, a washable mineral paint, *"Basaltine,"* has been employed so that, in the presence of infectious diseases, they may be cleansed with soap and brush and disinfectants without injuring the surface.

From the foregoing description it will be seen that the Mannheim Hospital is a most modern institution from a constructive as well as a hygienic standpoint. The architect, who is, at the same time, the writer of this article, will be pleased to conduct through the plant any architects from the other side of the ocean who may happen to visit Germany.

HOSPITAL OBSERVES ANNIVERSARY

Founded as a memorial to the victims of the Johnstown Flood, the Conemaugh Valley Memorial Hospital on February 22 celebrated its thirteenth anniversary.

The hospital is the direct successor of the Red Cross Field Hospital established in Johnstown a few days after the great disaster which occurred on May 31, 1889. Immediately following the flood the Philadelphia branch of the Red Cross entered the city and erected numerous tents for the care of the sufferers. Soon a temporary wooden structure was completed. The present hospital, erected as a memorial, was ready for the reception of patients on February 4, 1892.

At a banquet and program which marked the anniversary celebration, the present needs of the institution were announced. An appeal was made for the erection of a new wing to the hospital proper, the installation of a modern pathological laboratory and the completion of the nurses' home now under construction.

HOW TO INTEREST DOCTORS IN THE SOCIAL TRAINING OF MEDICAL STUDENTS

By EDNA G. HENRY, Department of Social Service, Indiana University, Indianapolis

IT IS doubtful if anything except his own social training as a medical student will interest any physician certainly and permanently in such education. His attention may have been attracted to it by some unusual intern who had been well taught. He may have seen the value of it by being associated with medical students who were getting it. The demands of some large free practice within or without a medical institution may have made him feel the need of it either for himself or for others. Or scholarliness joined to the best scientific skill may have caused him to see the reason for it and the answer that it might be for the modern physician.

"This is the way of salvation—to look thoroughly into everything and see what it really is, alike in matter and in cause; with your whole heart to do what is just and to say what is true; and one thing more, to find the joy of life in heaping good on good so close that not a chink is left between." When Marcus Aurelius said these words so long ago he could hardly have been thinking of medical men and their connection with social work. But we can see in them, as Miss Henry has pointed out, the goal toward which the doctor interested in social work is progressing, the demand of the public for medical men more aware of their patients' full lives and of all ways to save them.

Perhaps these scholarly men are the only ones who beg for such teaching for students. Perhaps they seem to have forced it upon their followers and their colleagues. But this is more fair than it appears. Education is the one commodity which it is not only allowable but necessary to offer before there is a demand for it.

When the initiative has been taken by the scholar and the instruction offered, other men will be won to it by the result of that instruction upon the students and by the character and ability of the people giving it.

This means that the medical institution in which the students work must have a good medical social service department which practices what it preaches. The teacher of the new subject, for the present at least, must be a social worker, not a physician. But this instructor must be, if a woman, not a handmaiden to the doctor, nor a meek servant of the medical man, but an expert in her own line. Because she knows more than the doctor of her own business, she will respect him the more thoroughly for his knowledge of an older and larger field.

Actual antagonism to such teaching dies at once upon acquaintance with such a department and such a teacher. It expires with the mere knowledge of what such teaching hopes to give.

No one with sense wants to make a social worker of a medical student. With each year the modern physician grows more and more away from that early if valuable type of man who was the sole doctor, father-confessor and social worker of his community. Yet year by year life becomes more difficult, especially for the general practitioner who knows nothing of the social complexities of modern life, of its increasing industrial control, of the institutions and resources and social laws of his state.

It is only the question of education as stated by Spencer and by Montaigne. This youth needs to know what to do, and how to do it, when he becomes a man. This particular youth intends to be a doctor when he is a man. Therefore he needs to learn, both how to be a good one and what his job as a doctor will be.

It is in helping to answer the second query only that his new teacher can help him.

He can be told nothing about the mysterious machinery of medical institutions. He is studying medicine. During the process he probably will acquire more knowledge of the hidden peculiarities of hospitals and dispensaries than is in the possession of their own superintendents.

He is going to practice medicine and he will practice it for a generation which daily values health more and doctoring less. If he is to live, he will have to learn, not only about disease, what health is, and how to recover it, but how to produce it and how to teach people to get and to hold it.

In order to do this, he must know men, not only their bodies, but the relation of those bodies to each other, to spirit and to environment. He must know not only the whole man but the unit of which he is a part. He must learn not only what is the matter with his patients stomach but what in his life may have made it what it is and what elements of normal life which might restore it are missing.

He must know, not only from a medical, but from a social, point of view, what a normal life is, and what various divergencies from it there may be. Especially does he need to know which of these divergencies are due to disease and which create or increase it. Most of all, he must know what is his own problem. What is the chief cause of death? Is the cause of that cause physical or social, or both? What is the greatest cause of illness? What creates business for the doctor? Which is the more profitable, the more worthy type of the business, curing or preventing? What are the social aspects and results of heart disease and what of tuberculosis?

He should know what social problems are the product of disease. What germs make orphans? What creates the most widows, tuberculosis or industrial accident—or war? Which is more responsible for idle men, financial depression or syphilis? What disease breaks up families? What social conditions increase illegitimacy? Does illegitimacy affect child welfare? In how far is the doctor his brother's keeper?

These questions and some of their answers may be set forth in lectures. Lectures, too, can tell him of the laws, institutions, resources and needs of his state.

But he needs case work too. He learns medicine by it. He sees the patient in the hospital, but in the hospital he does not see the patient. There the patient is clean, dressed, sober, fed and comfortable.

He cannot be expected to guess that the Madonna-like mother of his nicest baby will feed it figs during its first day at home, or that his favorite patient, an old and witty Irishman with myocarditis, lives on the fifth floor with a son who beats him regularly.

Even in a dispensary he may not learn why patients refuse to go to a hospital. One patient's child died there, another cannot get morphine, and a third does not dare to leave her husband. He may not find out that the Roumanian woman failed to return Saturday because she had to care for the altar flowers on that day, and that the patient with a mitral lesion was worse because there was no one else to lift or wash for his crippled wife. In discovering such facts he will train his imagination to work later in caring for his own patients.

Should Have Contact with Social Service

He needs to know all this and more as he enters a profession his success in which will depend upon a combination of scientific knowledge and the missionary spirit. He needs to have early implanted in him faith and altruism. This can be done no better than by placing him in contact with a good social service department so that he can see the social back grounds of all his medical problems and himself render daily service in decreasing all misery as well as sickness. There should then be added definite instruction by some wise and obstinately optimistic or far-seeing social worker.

A social service department, or in time professors of medicine using material gathered by it, may thus by lectures and supervised field work make of the student, not a social worker, but a better doctor.

He will be the one later to further progressive legislation or to win fame by showing a way in which all men may profit by medicine. His town will know that a lot of its sickness and misery, among rich and poor alike, is unnecessary. He will be not only a great doctor but a citizen alert about bad housing and bad motives as well as bad hearts.

Never will he treat only an eye or examine only lungs. He will want to know all that has made the man what he is, and all that may be needed both to make him better and to prevent repetition of his suffering in others.

Doctors Must Use Sociology

"By their fruits ye shall know them." Those who are interested in the social teaching of medical students, those who are convinced of its value, argue little. They teach and await the future. More than one state now is dotted here and there with medical men who have had blind spots removed in their student days. And if the blind spots were removed, they need no further argument. For the present, the undebated question lies in the hands of a few leaders and scholars in sociology and in medicine. Soon the present students will compose the majority of their profession in their localities. Meanwhile those who believe in such instruction must see to it that new medical men able to use this knowledge for the progress of medicine are created and that the non-medical instructors are sociologists, not sentimentalists, path-finders, not followers. At all times they must be persons who can command the respect of the thinkers and doers of the greatest profession in the world.

Medical men themselves must decide in what way the new profession of social work or the rapidly developing science of sociology can serve their purpose. Even as they seized upon chemistry and biology, so must they seize upon sociology. The power of medicine has grown out of its willingness, nay its eagerness, to take for its own purposes the knowledge made available by

each new science. Medicine itself must decide this. And it may be that if the power of the past has been in this, the future may depend in part upon the profession's ability still to recognize and to use new knowledge.

To the non-medical mind the growth of sociological knowledge means little as yet but that it must be added to the content of the educated man's mind. No matter what his calling, be he lawyer, doctor or employer, he soon will not be educated unless he does make this knowledge his own.

There are some who ask if this education may not point the road the profession must find if it is to justify its continued existence and exaltation. No educated man denies one iota of its greatness to medicine. But no educated and humane person today believes that the blessings of medicine are sufficiently in use, understood or available. May the possible improvements in the present situation be pointed out, not by the ignorant layman or the well-intentioned social worker, but by some medical man taught in his youth by great doctors, working with thoughtful sociologists?

Meanwhile those who carry forward the work have no argument for convincing others. These must come to see it themselves out of their own experience, or their own need, or wait until time settles the question.

The demand of the public therefore, for medical men more aware of their patients' full lives and of all ways to save them, but calls for what the doctors themselves want when they demand help from all knowledge, from every flower that blooms and every tree that grows.

And what they both seek will but give to the doctor what Marcus Aurelius long ago desired for all men.

"This is the way of salvation—to look thoroughly into everything and see what it really is, alike in matter and in cause; with your whole heart to do what is just and to say what is true; and one thing more, to find the joy of life in heaping good on good so close that not a chink is left between."

COOK COUNTY HOSPITAL FARM NETS $14,000 IN SINGLE YEAR

How distinct an asset the farm can be in connection with a public hospital is evidenced at the Cook County Tuberculosis Hospital at Oak Forest, Ill. Henry L. Bailey, general superintendent of the infirmary, has prepared for THE MODERN HOSPITAL the following data based on farming operations at Oak Forest during 1921:

"Our cultivated acreage during the season consisted of 150 acres of oats, 120 acres of corn, 75 acres of hay, 10 acres of alfalfa and 92 acres devoted to the growing of various kinds of vegetables.

"The principal items of the season's harvest consisted of 6,480 bushels of oats, 2,800 bushels of corn, 85 tons of hay, 67 tons of straw, 3,700 bushels of beets, 29,000 heads of cabbage, 3,500 bushels of carrots, 2,900 bushels of tomatoes, 900 bushels of potatoes, 600 bushels of onions, 1,700 bushels of parsnips, as well as numerous other varieties of garden vegetables.

"During the winter months our greenhouse produced 1,162 cases of lettuce and 153 bushels of cucumbers.

"In addition to the above, fresh pork to the amount of 49,352 lbs., fresh mutton 2,314 lbs., dressed poultry 4,048 lbs., fresh eggs 1,688 dozen, and goats milk 2,506 gallons were furnished to the institutions.

"The total value of these products, based on current Chicago produce market quotations on dates of delivery, was $36,496.77. In addition to this we had on hand at the close of the fiscal year December 1, 1921, live stock consisting of hogs, sheep, goats and poultry, with a market value of $14,172.63. Our total operating expenses for the year were $23,700.00, leaving a net income of approximately $14,000.00.

"In connection with the institution the County operates an extensive greenhouse, where cabbage, tomatoes, pepper, cauliflower seed, etc. are propagated and transplanted to hotbeds on the outside to harden until time for transplanting to the field. Our expenditures for garden seeds last year amounted to the sum of $696.00.

"There are also operated during the hatching season several large incubators for the raising of young chicks, ducks, etc. Turkeys and geese are also raised annually and kept on the farm.

"Our dairy operations are limited to a herd of thirty-three goats of the Toggenburg breed. These goats last year supplied 2,506 gallons of milk, which was furnished principally to the children in our tuberculosis hospital.

"Through an arrangement with the Rock Island Railway Company we have a comparatively inexpensive means of obtaining large quantities of fertilizer for our farm lands. Many of the west-bound empty stock cars of the company are switched to our sidetracks for cleaning, and the only expense in connection therewith is the labor incident to cleaning out the cars and spreading the fertilizer on the land.

"In a large institution of this character, handling as we did during the year just closed a grand total of 7,500 patients and employes, there is of necessity a large accumulation of garbage from the kitchens and dining rooms. This garbage is systematically separated, and that portion suitable for hogs—of which we usually maintain from 500 to 600 head—is put through a boiling and sterilizing process and served to the hogs in a warm condition both winter and summer. Table waste, such as bread crusts, is ground up and served to the fowls, so that the actual waste is reduced to a minimum.

"Our regular farm labor is augmented by the services of about twenty men who are detained here through court process. The only expense in connection with them is their maintenance, consisting of board and clothes. This arrangement also serves to reduce operating expenses to a considerable extent.

"Thus it will be seen that the particular advantages we enjoy in obtaining a maximum amount of labor at minimum expense, low cost of fertilization, and an efficient system for the utilization of available garbage, all contribute toward making the farm a valuable asset to the institution."

Disease is a retribution of outraged nature.—Hosea Ballou.

PIONEER INDUSTRIAL HOSPITAL OF CAMBRIA STEEL COMPANY HAS NEW PLANT

By JOHN B. LOWMAN, M.D., Chief Surgeon, Cambria Steel Company, Johnstown, Pa.

WHAT has been pronounced by many who have inspected it as the finest industrial hospital plant in the country has been completed recently at Johnstown, Pa. by the Cambria Steel Company for its employes.

The hospital was opened for service July, 1921, and has accommodations for eighty beds—four wards and nine private rooms. The building covers approximately 16,500 square feet. The central administrative bay is four stories high including basement, and the two wings three stories.

The original hospital, a pioneer of its type, was built in 1887 under the direction of Dr. Webster B. Lowman, surgeon of the Cambria Iron Company, and was a frame structure with twelve beds. This was the first hospital ever operated by an industrial corporation, and from it similar enterprises in other localities had their incentive.

The great benefits derived from this hospital required the addition of many departments, until in 1919 the cost of maintenance demanded the necessity for a more modern building adapted to the best surgical work of the day.

Cambria Steel Company through its president, Mr. A. A. Corey, Jr., and under the direction of the chief surgeon, Dr. John B. Lowman, decided to erect a new building which would be in the line with the best modern hospitals in the country. The hospital staff and the engineering department were authorized to study prevailing practices in the newest hospitals. Representatives therefore made complete inspections of such existing installations, and the result of their studies is embodied in the new building.

It was found desirable to separate the nurses' quarters from the hospital department, and therefore a nurses' home in a special building was authorized as part of the construction. After the plans had been properly discussed and the general working layout agreed upon as the best obtainable, the work was handed to Mr. Benno Jansses, architect of Pittsburgh, with instructions to furnish designs for both a hospital and nurses' home. The contract was awarded to Mellon Stuart Company of Pittsburgh who finished the building according to time and specifications.

The new hospital building of the Cambria Steel Company at Johnstown, Pa. This company claims the distinction of erecting the first industrial hospital in the country.

The nurses' home is adapted for housing thirty nurses, and as pictures and prints show is complete in every detail. The first floor is devoted to reception rooms, private and public sun porch, toilets, lavatories, laundry and sewing rooms. The second and third floors are given over to

From the front door the visitor gets this view of the attractive lobby.

A well equipped operating suite is on the second floor.

Private rooms are tastefully and conveniently furnished.

private rooms equipped with baths, toilets and lavatories, private and general; on the roof is an open-air garden.

The hospital is of fireproof construction throughout, the walls being of red brick, the frame and floors of reinforced steel, the partitions of gypsum, and the roof of slate laid on concrete slabs. Trimmings are of Ohio marble. All floors are finished in terrazzo except those of the private rooms which are hard maple. The bases are terrazzo coved and have been set flush in plan and elevation.

A typical ward at the Cambria Steel Company Hospital.

In the basement wings are the machinery sections, and in the center basement are located the main kitchen, refrigerators, nurses' dining room, and storage rooms. On the main floor of the north wing are the receiving rooms and outpatient department. In the south wing are the private patient rooms, and in the center bay, the superintendent's suite, main office, doctor's office and two large reception rooms for visitors. Spacious halls add to a pleasing interior.

On the second floor wards are located in each wing, also a special ward in the administrative bay all equipped with diet kitchens, sterilizing rooms, nurses' stations, recovery rooms, patients' clothes' rooms, lavatory and bathrooms of the best sanitary type. The operating suite, the laboratory and x-ray department are also on this floor.

On the third floor are located an open air solarium, enclosed solarium and gymnasium; also a room for a McKenzie reconstruction outfit, occupational therapy and massage work is found.

The building is equipped with a modern elevator with double exits, an enclosed fireproof stairway which runs from basement to third floors, two enclosed fire escapes, and one outside fire escape. Each floor is equipped with fire pressure system and hose connections fed from the water lines of the company. The building is also thoroughly equipped with fire extinguishers. The heating system is direct steam, high pressure type, from the main boiler plant of the Cambria Steel Company, the pressure being reduced to service required by a control unit at the basement entrance.

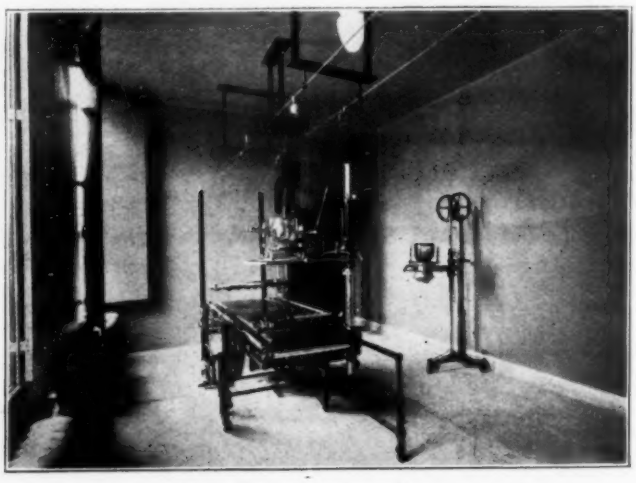
Equipment is Up-to-Date

Every room and every department are equipped with a vacuum and a plenum system of ventilation which permits the temperature of the hospital to be the same rating throughout.

The drinking water is sterilized, filtered and ice-cooled by a Forbes sterilizing plant in the basement, then circulated to drinking fountains in all parts of the hospital.

An ice machine which makes ice for general hospital use has a brine circulating system for cooling the refrigerators on the different floors.

Electric lighting and power are furnished by the Cambria Steel Company, and are of both AC and DC type, modifications in phase and voltage being possible by a necessary motor generator and transformer. Both phase and voltage may be controlled by works or city service, each available at all times.



The x-ray department of the hospital has complete equipment.

The modern type of steel cupboards, closets, blanket warmers, lockers, etc., which calls for built-in construction, has been installed so that no corners or dust-gathering shelves are found in any part of the hospital from the basement to the top floor. The halls and stairways show flush walls and no projections, all door bucks staying flush with walls even at sill entrances.

Connection With First Aid Stations Close

In addition to the nurses' home and hospital, which have been newly constructed, there are quarters for the laundry and help, newly renovated and adapted for service in accordance with the latest ideas. The hospital can be reached from all departments of the company by direct telephone connection. Ample ambulance service is also available, and a complete staff of surgeons and nurses is always on duty.

The hospital is located near the Pennsylvania Railroad station on a hill known as Prospect, and is within ten minutes' ride of the farther point of the works.

The flexibility of the system is such that in case of emergency 100 patients can be cared for, and in ordinary times from sixty to seventy. When racial or other factors enter, isolation is possible without additional expense.

From the main hospital the various first-aid stations in the works are directed and the nurses at these stations are in constant communication with the hospital day and night.

Thirty student nurses are housed in this new residence.

Off the solarium on third floor is a gymnasium with reconstruction outfits, occupational therapy equipment and facilities for massage work.

Expense has not been spared in furnishing the nurses' home.

DIETING AT THE WALDORF

Enters now Oscar of the Waldorf-Astoria into the sacred province of the hospital dietitian. With his seven diets, Oscar has set out to prove that an individual can live on the viands of a great hotel and not only retain his digestion but even correct various disorders by means of the menu card.

The Waldorf-Astoria is perhaps the first hotel to inaugurate a scientific diet service for the patrons of its dining rooms. A medical consultant has aided Oscar in presenting to Waldorf patients the seven diets, any one of which may be obtained from headwaiters on request. Each patron is asked to follow his diet under the advice of a physician.

Oscar's Diet Menu No. 1 is a high cellulose diet for patrons with the atonic type of constipation and intestinal-toxemia. Diet Menu No. 2 is high cellulose, low calory, low in fat starch and sugar for obesity. "Food quantity, food quality and the Will to get thin are important factors in reducing," says the menu of this diet. "Obesity fads do tremendous harm. Weight reduction by following the straight and narrow paths of rational dieting and exercise rather than the devious paths of drugs and 'isms is the only safe course. A reducing cure should be supervised by your physician."

There are also a moderate fat diet, a low cellulose, low condiments diet, a low cellulose, a high calory and high fat diet for children and convalescents, a low purin diet for rheumatism and gout and a low salt and low purin diet.

In announcing the scientific diet service to its patrons, the hotel management warns against over-eating, imperfect mastication and mental perturbation at meals.

"It is to be understood," says the announcement, "that the Waldorf-Astoria is in no sense prescribing diets and has no food fads or fancies to foist upon its patrons. It is simply making special dietetic articles and properly cooked foods available. Persons making use of these diets should submit them to their medical advisor for individualization."

THE NURSES' RESIDENCE

By EDWARD F. STEVENS, Stevens & Lee, Architects, Boston and Toronto

THE nurses' residence is no longer a rooming house where persons go for purposes of sleeping only, but has become a technical school for the nursing profession. While there must be sleeping quarters, of course, there also must be accommodations for teaching and study, and provision for the social function and the tete-a-tete with sufficient reception and common rooms to allow nurses to receive their friends decently.

Certain standard principles should govern all nurses' homes as to size of rooms, proportion of toilets to rooms, light and air, and as to provision for the care of nurses when ill. Protection also should be afforded the night nurse who must sleep through the day.

It is the opinion of many who have charge of the training of nurses that no sleeping room, whatever the size, is large enough for two. There should be space for a bed or, as many prefer, a bed couch, a bureau, a small desk and bookcase (which can be combined in one piece of furniture), some comfortable study and relaxation chairs; a picture or two on the wall; and at least one rug on the floor should be provided.

Windows should be so arranged as to give the best light, and artificial light so placed for reading as to prevent eye strain. The room closet should be large, and if lighted by a small window, its usefulness will be increased. A set bowl in each room is appreciated by the nurse.

A room to meet the above requirements should be not less than eight by twelve feet.

There should be allowed in the nurses' residence one tub or shower to every six nurses and enough toilets to allow one closet to every six nurses. If the wash basins are in the toilet section, there should be one bowl to every three nurses; additional dental bowls facilitate the working of the home.

Teaching Facilities for the Nurses

If the nurse is to receive her preliminary training outside the hospital, provision should be made in the home for laboratory work and for the teaching of dietetics. There should be a complete utility room, fitted with the actual equipment that will be found in the hospital. Of course, rooms for lectures and demonstration, besides the larger social and reception rooms, should be provided.

Coming from the care of patients, the nurse upon entering the home should step into a different atmosphere. There should be nothing to remind her of sickness. The colors selected for

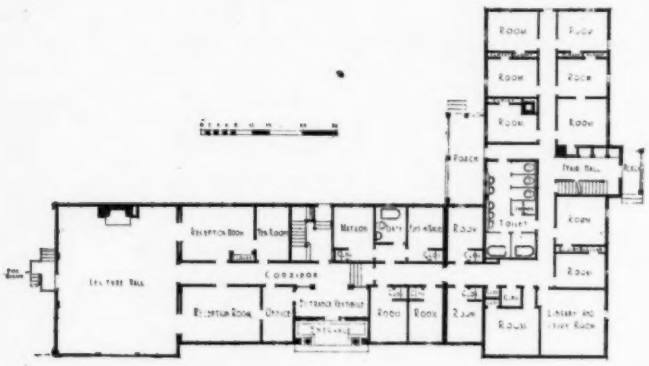


Fig. 1

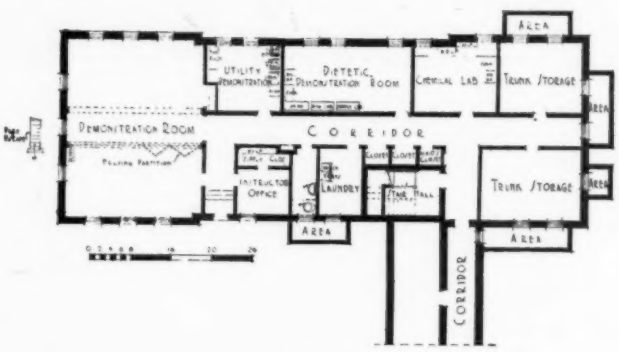


Fig. 3.

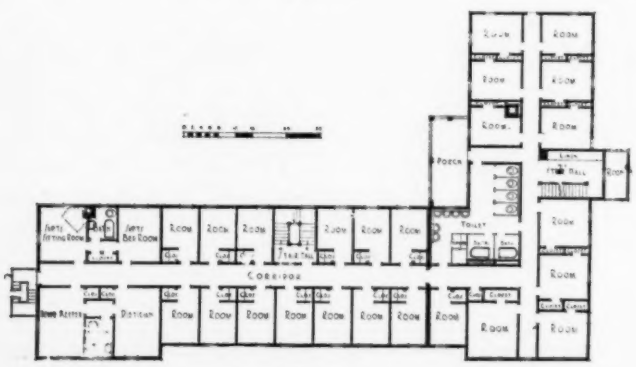


Fig. 2.

Fig. 4.

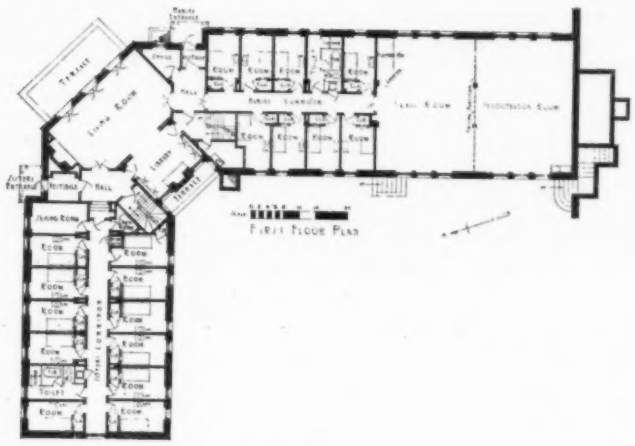


Fig. 5.

Fig. 6.

the walls and ceilings of the rooms should be different from those for the hospital. While plain details of finish make the care of the home less irksome, there should be enough detail to give interest; the entrance, at least should possess some architectural merit.

In most homes rooms are set apart for nurses on night duty, with the doors merely tagged "Night Nurse Sleeping." A device which the writer found in a hospital in Holland has been adopted for use in the States and is herewith shown. It is merely a permanent part of the number plate which every door should have, showing the name of the nurse. The "drop," when lowered, exposes in large letters the word, "ASLEEP." (See Fig. 9.)

New Addition to Heywood Home

Of the four nurses' residences here considered, conditions governing the planning were so varied that they bear little resemblance one to another except as to individual rooms for the nurses.

The Heywood Nurses' Home (Figs. 1 and 2) was an addition to an existing building, so that the functioning of the rooms is not as it might have been if planned originally.

In the new portion are the reception rooms and library, the small parlors, and the little pantry for the preparation of the midnight feast. The house matron's room is on the first floor, with an observation window near the entrance so that she may keep her motherly eye upon the "late leave." The superintendent and members of her staff have suites of rooms on the second floor. The diet kitchen and laboratory are in the basement.

This is a simple home of wood construction, housing sixty-nine nurses, and is located about 500 feet across the street from the hospital.

Annex Provides Sleeping Quarters

The New Britain Nurses' Residence (Figs. 3 and 4) is also an addition to the existing home. Built, as it is, in the rear, the social parlors and reception rooms are in the front building; the new residence functions for the housing of pupil nurses, with suites of rooms for the head nurses.

On the first floor, two rooms are set apart for an infirmary, fitted with a small utility cabinet containing a gas plate and emergency equipment.

On the ground floor are located the teaching sections, a large subdivided lecture hall, service room with working equipment, laboratory and dietitian's laboratory, trunk room, small private laundry, etc. The toilets are located near the entrance and are well lighted and subdivided into sections.

The connecting corridor to the front building is made wide enough for a sleeping porch. Heat is supplied from the hospital plant at the north.

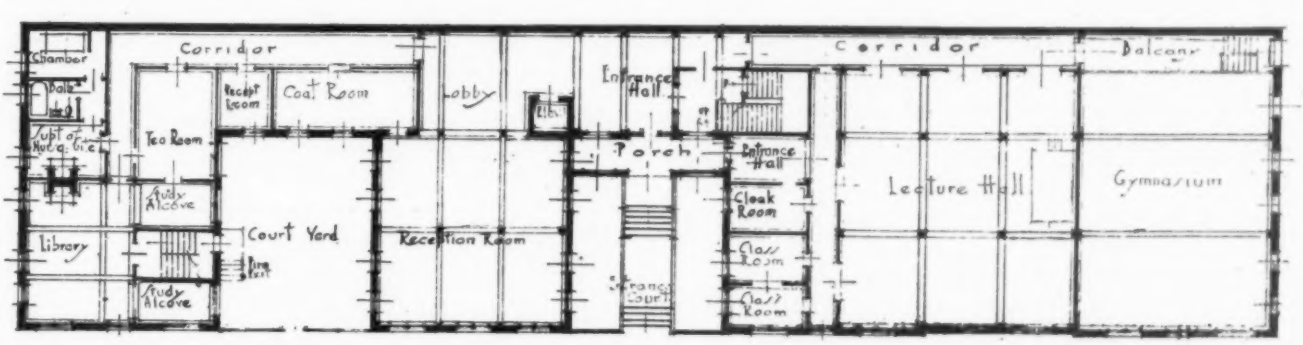


Fig. 7.

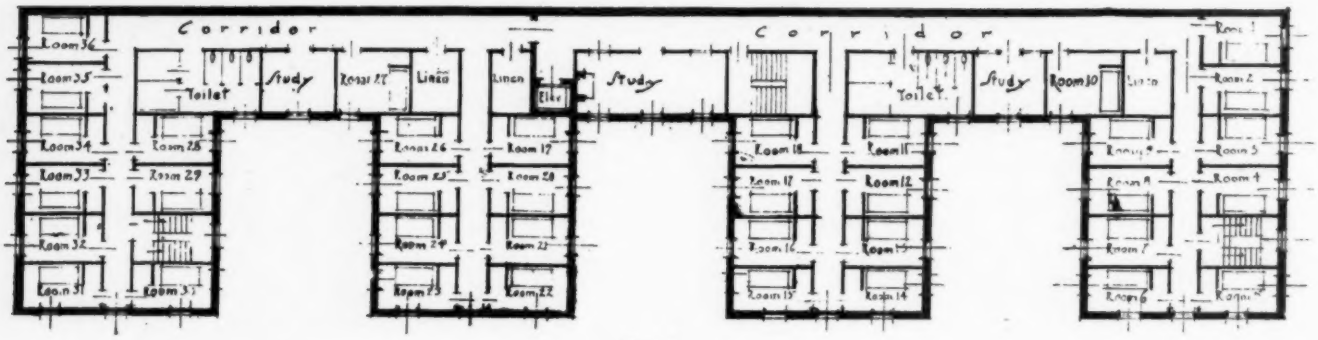


Fig. 8.

The residence is not connected with the hospital which is about two hundred feet distant. The building will have brick walls and will be of second class construction.

Sisters' and Nurses' Home Combined

The nurses' residence of St. Joseph's Hospital at Hamilton, Ont. (Figs. 5 and 6) functions in a two-fold manner, being a home for the Sisters of St. Joseph and a residence for the pupil nurses of the institution. There are separate entrances and separate staircases in each section.

The "L" shape, with the double approach on the angle, lends itself to the condition of facing on two streets, while the angle makes an excellent location for the main reception room and library, which are entered from both the Sisters' and the nurses' portion of the building.

While the three homes previously described are located on lots where there is plenty of light and air, the conditions governing the nurses' residence for the Harrisburg Hospital (Figs. 7 and 8) are entirely different. A rather narrow street and two narrow city lots necessitate building into the air to obtain room for the 200 or more nurses eventually needed. To utilize the land to the best advantage, the home is being built in a series of short pavilions facing the street and the hospital across the street.

On the first floor, approached from the center court, is the main entrance leading to the reception rooms and offices, and at a slightly lower level the assembly hall. On the front of the building is the suite of the superintendent of nurses. Elevator and staircases lead to the floors above which are to be occupied by the pupil nurses. When finished, the building will be seven stories in height, with single rooms and home accommodations for 216 nurses. Each nurse's room has a lavatory, a large clothes closet and ample room for comfortable living. At the center of each court, facing the south, will be a study room.

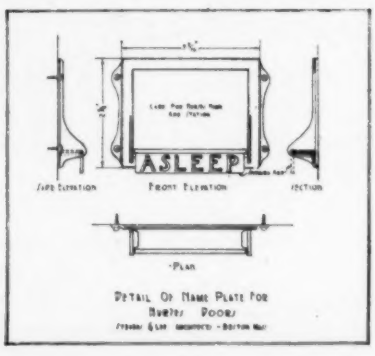


Fig. 9.

On the ground floor will be located the teaching rooms, the chemical and dietetic laboratory and the demonstration service room.

Every room will receive sunshine, as the building faces south.

VALUE OF CLINICAL HISTORY

The value of a proper clinical history has been obscured in the minds of many by the elaboration of the multitude of laboratory tests, it is feared by *The Bulletin of the Harbin Hospital* at Rome, Ga. The bulletin declares:

"Laboratory tests have become a fetish at whose shrine too many physicians are inclined to worship, overlooking the fundamental values which may be obtained by employment of reasonable intelligence and observation. A careful history going back to the earliest period of the patient's life, bringing out supposedly minor details which may be of a very definite significance, refreshing the patient's memory of all other events and building up a structure in detail will in a number of cases do more to establish a diagnosis than all of the laboratory tests put together.

"It is not meant by this to discredit the value of the laboratory, as it is today an absolutely essential adjunct. The clinical evidence must not be overweighed or distorted by laboratory findings, as they are often not compatable. The laboratory must be the servant of the physician and not his master. In the findings analogy, discretion, intelligence and experience which may be summed up in one expression, and may be termed 'clinical judgment' is our one unfailing asset.

"While upon this matter it may be remarked that as a general thing the family history is of little importance. The case of antecedent nervous systems, a general idea of the family physique and the presence of tuberculosis—not from the standpoint of family susceptibility, but rather to furnish knowledge of exposure—when we have covered this ground we have known almost all that is to be learned from a family history."

"Work is the law. Like iron that lying idle degenerates into a mass of useless rust, like water that in an unruffled pool sickens into a stagnant and corrupt state, so without action the spirit of men turns to a dead thing, loses its force, ceases prompting us to leave some trace of ourselves on this earth."—Leonardo da Vinci.

THE DEVELOPMENT OF A RADIUM AND ONCOLOGIC INSTITUTION IN CALIFORNIA

By REX DUNCAN, M.D., Medical Director, Radium and Oncologic Institution, Los Angeles, Cal.

THE organization and development of The Radium and Oncologic Institute were made possible through the interest of King C. Gillette and others, who because of certain personal benefits received, desired to make available to the public adequate quantities of radium and the necessary apparatus and facilities for the study and treatment of neoplastic diseases and other appropriate conditions.

Organized in 1918

The incorporation was completed in December, 1918, and the medical director instructed to make a survey of certain hospitals and institutions in this country. Based upon these observations and several years of personal experience, plans were drawn for a building for the Institute which was completed and occupied in August, 1919. On account of the large number of ambulatory cases treated at such an institution a site was chosen on Sixth Street at Lucas Avenue, which is about a five-minute ride on the street car from the center of the business district. This street is one of the principal cross town thoroughfares, sufficiently far from the business section to avoid, to some extent, noise and traffic congestion.

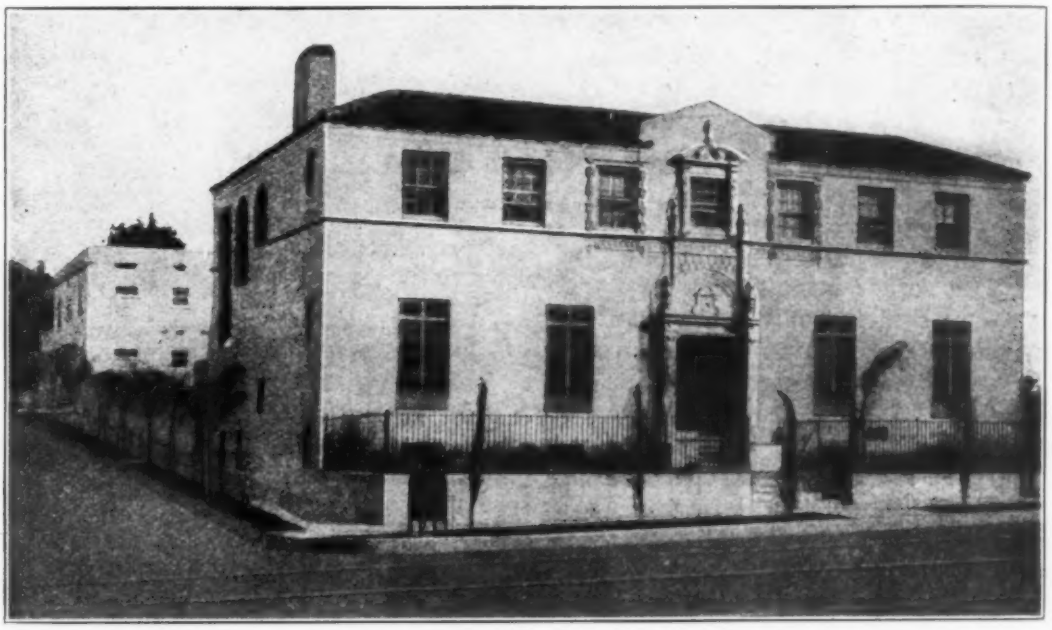
The building with a southwest exposure is located on a corner lot 70x145 feet. The "L" shape of the present building leaves room for an additional wing 45x70 feet retaining a small garden and lily pond. The building is of Class A construction. The exterior is of a classical Spanish type of architecture, which is consistently carried to the interior and combines simplicity of design with pleasing artistic effect. (See illustrations).

General Plan of Hospital

The basement has a furnace room, workshop, several storage rooms and two bedrooms with bath for employes. On the first floor are the business office, reception rooms, physician's offices, examining rooms, treatment rooms, radium laboratory, clinical and pathological laboratories and x-ray department.

The second floor is devoted to the hospital department providing ten large private rooms, two two-bed wards, eight baths, utensil, sterilizing and supply rooms, operating room, kitchen and dining room for the employes.

In the hospital department, as elsewhere, an effort has been made to make the rooms attractive without sacrificing the advantages of sanitation. The hospital is under the supervision of a graduate nurse who has full charge of diets and kitchen, general supervision of nurses, and care of patients. Although no training school is main-

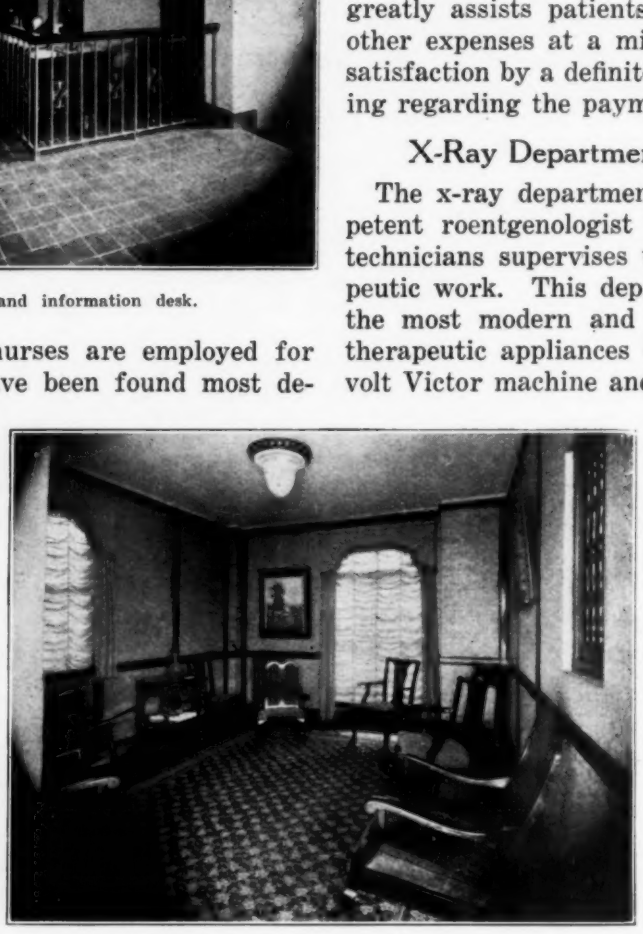


The Radium and Oncologic Institution of Los Angeles.

Main reception hall and information desk.

tained, undergraduate nurses are employed for seven-hour duty and have been found most dependable for this work.

Only such patients are admitted in the hospital department as require the special facilities offered; they are retained in the hospital during the period of active treatment. The few requiring prolonged institutional care are referred to a sanitarium cooperating. The number of hospital days per patient varies from one to fourteen. The average number of days for a hospital case is approximately four, enabling the institution with a limited number of rooms to handle a rather large volume of work. Ambulatory cases requiring only a few hours in bed are not admitted as hospital cases but cared for in properly equipped treatment rooms on the first floor.



The corner of a reception room.

Although the hospital is thoroughly equipped for general surgery it is not practiced in the institution; the operative work is limited to a certain class of cases for which the institution is conducted.

Medical Director Supervises Institute

The work of the Institute is divided into several departments, each with a capable head who cooperates and works under the general supervision of the medical director.

The business management of the institution is handled by the business manager, who has charge of the general business conduct of the institution, including maintenance, purchasing of supplies, collection of accounts, etc. He also interviews each patient who seeks, or is apparently deserving of, special financial consideration to determine his financial status. On these findings are based charges for professional services. This service greatly assists patients in keeping hospital and other expenses at a minimum and prevents dissatisfaction by a definite preliminary understanding regarding the payment of accounts.

X-Ray Department is Well Equipped

The x-ray department is in charge of a competent roentgenologist who with the necessary technicians supervises the diagnostic and therapeutic work. This department is equipped with the most modern and complete diagnostic and therapeutic appliances including a new 280,000-volt Victor machine and other necessary apparatus affording the most modern facilities for deep x-ray therapy. Careful records are kept and close cooperation with the clinical laboratory makes possible certain studies which are of considerable interest and may prove of great value in this newer field of work.

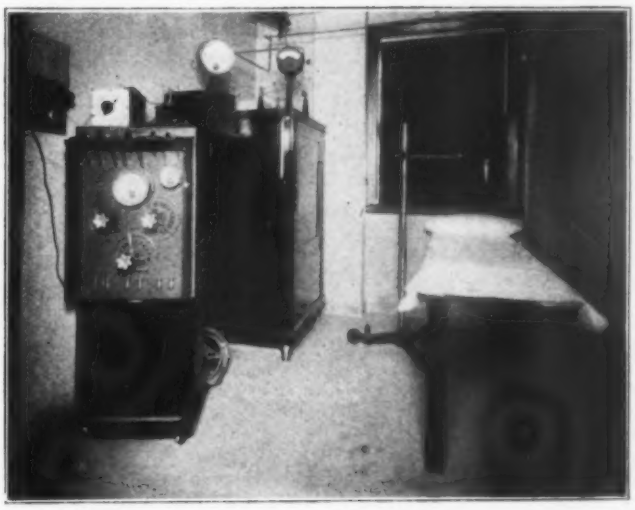
The clinical laboratories, in charge of a competent pathologist, are fully equipped for clinical, general pathological and certain research work. On each patient are done the basal metabolism determination, blood Wassermann, complete blood count,

An inviting corner of the library.

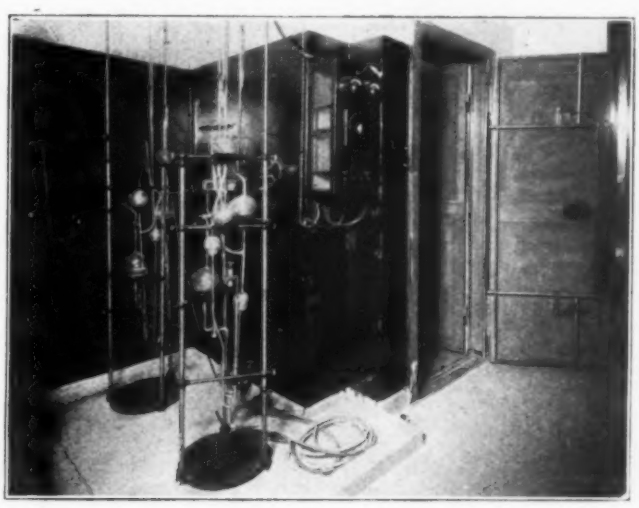
CO_2 blood retention, blood cholesterol and such additional blood chemistry as has been indicated. Tissue work is also done wherever practical.

One Gram of Radium on Hand

The radium department includes the radium laboratory and clinical branch. The radium laboratory is in charge of a physicist responsible for the collection and measurement of the radium emanation, which is obtained daily in such forms and quantities as the clinical department directs. In the laboratory there is approximately one gram of radium element in the form of bromide in solution. This solution is contained in a small safe which is permanently placed in a reinforced concrete vault in which there is also located the first set of vacuum pumps connected with the radium in solution. (See illustration.) These pumps are connected by glass tubes through the wall with another set of mercury pumps outside of the vault, the whole comprising what is known as a radium emanation apparatus. This apparatus contains the radium emanation given off by the radium in solution. The emanation is collected in small glass capillary tubes measured and turned over to the clinical department for use.



A small x-ray treatment room.



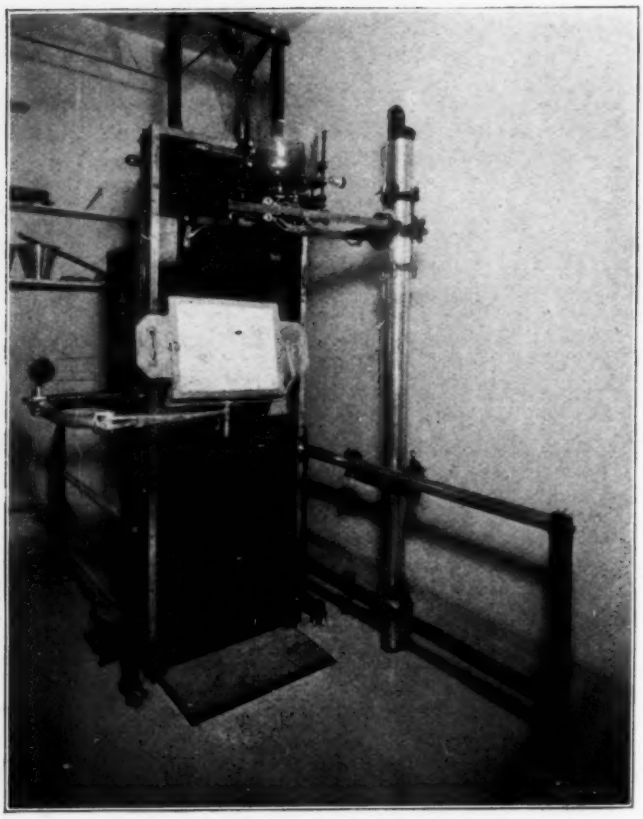
Radium emanation apparatus and vault.

The clinical branch of the radium department is directly under the supervision of the medical director, who, after proper examination and diagnosis have been made, prescribes and outlines the technique of treatment to be given each individual case. The assistant medical director personally supervises all radium therapy. The radium applicators are prepared and applied insofar as is possible by nurses who have been trained for this work. Nurses are assigned to this service for attending periods of two months, the other portion of their time being devoted to work in the examining rooms and the care and treatment of ambulatory cases.

General examination room.

All patients entering the hospital, if deemed appropriate for treatment in this institution, are, after a preliminary consultation with the medical director, referred to the internist who takes a complete history and makes a thorough physical examination. The routine laboratory work is done and such x-ray work as is necessary for diagnostic purposes. When the case has been thoroughly worked up it is discussed between the medical director and the various department heads and the treatment decided upon. The case is then referred to the proper department for treatment and is brought up from time to time for observation and discussion before the entire personnel. An effort is made to keep patients under observation and to maintain a complete and comprehensive follow-up record of all cases.

During the first three years of the existence of the institute, more than 1,500 new cases were treated. There were many subsequent visits, and



A corner of the x-ray fluoroscope room.

a large number of cases were examined that were not treated. Practically one-third of this work was of a charitable or semi-charitable character. All cases were handled in the usual routine without distinction.

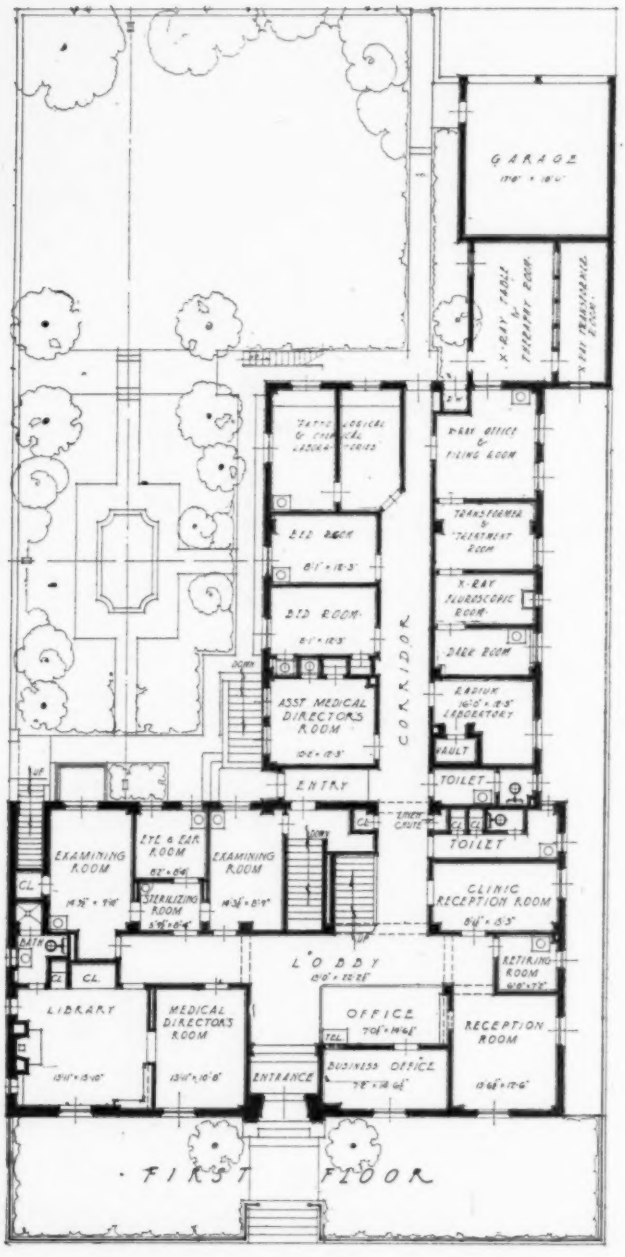
At the beginning of the fourth year new deep x-ray therapy equipment was installed, and the personnel and facilities of the institute were increased. The directors then decided to establish a definite clinic for the study and treatment of appropriate indigent cases. The medical profession is cordially invited to attend this clinic, the hours being from 9 to 10 on Wednesday and Saturday morning.

Scope of Institute Grows

With the establishment of this clinic, approximately one-fourth of the facilities of the institution have been set aside for the treatment of ambulatory indigent cases. There has been as yet no arrangement for free beds; however, certain patients pay only their hospital bills and many cases are treated at the County Hospital and other charitable or semi-charitable institutions.

The present assets of the institution amount to approximately $200,000. No interest or dividends have ever been paid on the original investment which was made purely from philanthropic and scientific motives. There is no endowment for maintenance, and overhead expenses incident to the conduct of the institution must be paid from the income derived from patients who are able to pay all or part of the usual fees. By careful supervision the institution has been able to maintain this overhead and accumulate a small surplus which has been used for the purchase of additional equipment.

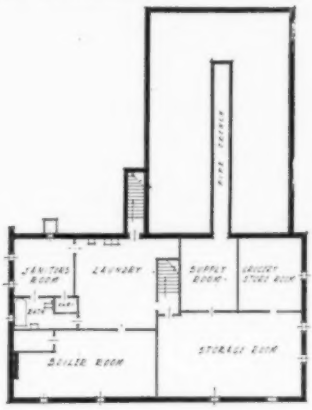
It is not within the province of this paper to enter into a scientific discussion of our work. A large majority of the cases treated by the institution are referred there by the medical profession, with whom the Institute cooperates to the fullest of its abilities. Practically all these cases are for diagnosis and for radium or x-ray therapy. Of this group about 75 per cent are malignant; the remainder includes a large variety of benign tumors, various skin diseases, goiters, etc.



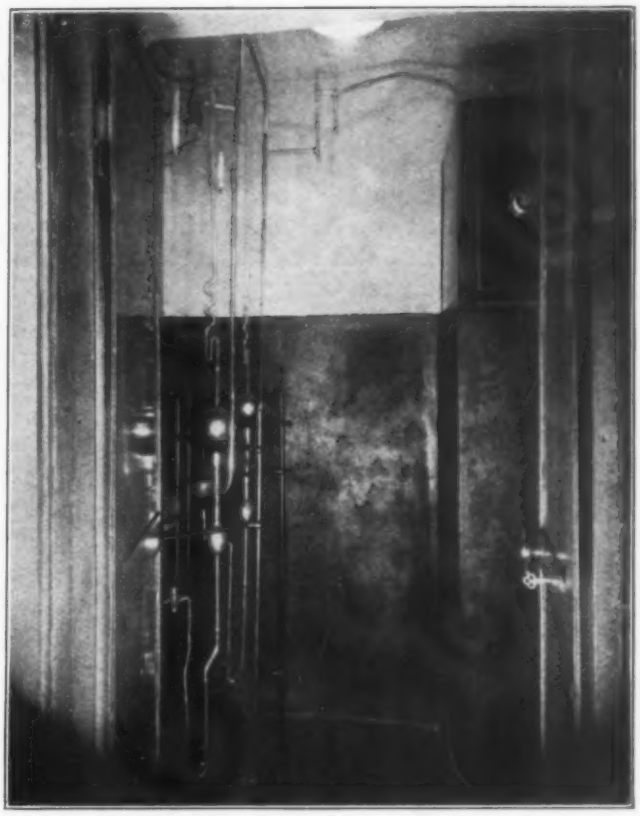
Plan of first floor.

The results obtained have been very encouraging and justify continued scientific study which is possible only in a highly specialized institution possessing all facilities necessary for diagnosis and treatment. More recently there has been treated, by the internal administration of radium, a carefully selected group of cases of chronic arthritis, high blood pressure and certain other constitutional diseases. Results thus far have been encouraging.

The scientific work of the institution and the results and observations of treatment furnish the basis of scientific papers prepared by the medical director and others of the personnel for presentation before various medical societies, and publication in various medical journals.



Second floor plan and basement plan above.



Safe and radium apparatus within the vault.

FIND "REST PAUSES" ECONOMICALLY AND PHYSICALLY BENEFICIAL

The Industrial Fatigue Research Board has issued a report on the boot and shoe industry, showing how in 1912, methods of giving rest to girl machinists, especially, were advocated on the basis of economic efficiency and physical welfare. But the coming of the war caused these measures to be given up, until in 1918 a shoe manufacturer found it necessary to increase his output without increasing his equipment, because of the difficulty in procuring machinery. It was decided to give the system of rest pauses a trial. The experiment was tried in a "press room" where the leather is cut into pieces by a machine, the handling of which requires a good deal of skill. Instead of having two girls working all day, three girls were employed each one working forty minutes and resting twenty minutes out of each hour. The results were so favorable that the system was adopted. The increased output on different machines varied from 34 to 75 per cent, and averaged 44 per cent. The effect on the workers was very beneficial, their health improved and they said that they no longer felt tired after the day's work.

WORKING OUT THEIR HOSPITAL BILLS

On private patients at Old Philadelphia Hospital did not fall the burden of helping maintain charity and part-pay wards. Clerk Benjamin Franklin of the hospital board of managers has in his minutes the following regulation:

"That such patients as are liable shall assist in nursing others; washing and ironing the linen, washing and cleaning the rooms, and such other services as the matron shall require."

STAINS ENCOUNTERED IN THE HOSPITAL LAUNDRY*

By WALTER TRIMBLE, Chicago

IT IS not possible to give in a limited space a full list of the stains found on the goods that come to the hospital laundry with directions for their removal, but a few general remarks on this important subject, with an outline of general principles, may be of assistance to the laundry manager.

Stains, like dyestuffs, may be divided with respect to their removal through reduction, or chemical action, into two general classes: (1) those which disappear through the application of a bleaching agent or oxidation; and (2) those which are removed by the opposite process of taking the oxygen away from them. Fortunately, the latter type is not encountered as frequently as those stains which come out through the actual removal of the atoms that make the stain, by the use of soap, alcohol, naphtha or other solvents. In other words, some stains are destroyed, and others are removed from the goods through detergent action with no actual change in the stain material.

First of all, I will caution the manager of the laundry department either to attend to the removal of all stains himself or to place the matter in the hands of a capable employe; it is a mistake to let several persons dabble with the necessary chemicals. Any stain that will be found on white cotton or linen goods may be removed, provided the discoloration has not been caused by some substance which has damaged the fiber; but it should be remembered that while some of the materials used in removing stains are harmless, others, if used improperly, will weaken or even destroy the fibers. As a general thing if a solvent will not mechanically remove a stain from colored goods, the stain had best be left alone since the material used in reducing the stain may also remove the dye. This is not always the case, however, but it is a matter upon which only an expert should attempt to pass judgment.

Advance Information a Help

If one can know in advance the nature of the stain that is to be removed, the procedure of removing it in nearly every case becomes comparatively simple. Most of the difficulty encountered comes from a guess at the nature of the stain and the consequent use of the wrong material. Hence, if the person who stains an article will send it to the laundry department at once with a correct statement as to the nature of the substance which caused the stain, the discoloration may be removed without difficulty. It is much better to remove some stains before the goods goes to the washing machine, for the washing process may "set" the stain and make it all the harder to remove.

Many stains are removed in the washing process through detergent action, and where bleach is used other stains are removed through oxidation, or "adding oxygen," as one might say. But the laundry manager should not make the common mistake, especially in the case of flat work, of using a bleach bath with the sole object of removing the few stains that may be in the goods. As I have stated, it is much better to ascertain the nature of the stains in advance and give special treatment to those that will not come out in the ordinary washing process.

When I speak of bleach I refer to what is now commonly known to the laundry trade as javelle water,—either a solution made from chloride of lime and soda or an electrolytic chlorine bleach. As javelle water is used daily in every hospital laundry, it is not necessary to give directions for its preparation. It is advised that the L. N. A. standard solution be used, diluted fifty times.

Stains Most Frequently Found

Blood stains, of course, are the ones most frequently found in the hospital. Fresh blood stains are removed in what is known as the "breakdown" bath of the washing process, this being a solution of tepid water and washing soda. Old blood stains require a treatment with javelle

This pressing machine unit is located in the finished-work department of the laundry of the Misericordia Hospital, New York City. One person operates both machines. Hand-ironing boards, with electric irons, are shown in the foreground.

*This is the fifteenth of a series of articles on the hospital laundry written especially for THE MODERN HOSPITAL by Mr. Trimble.

water, to which they readily respond, but there is no reason for these being encountered in a hospital laundry.

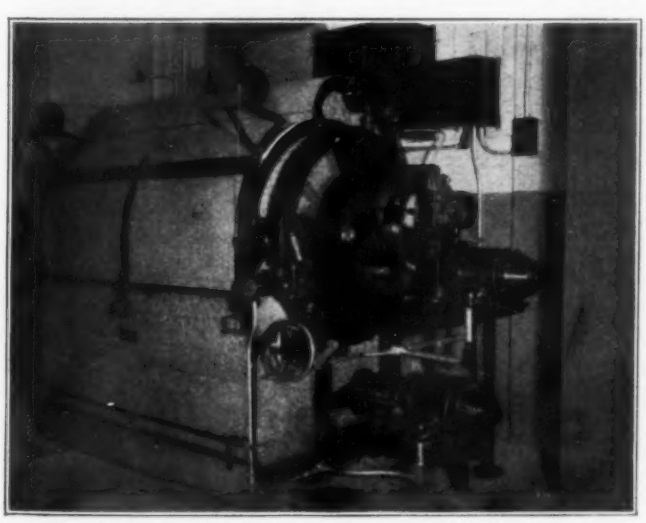
Various other stains of similar appearance are at times thought to be "old blood stains" and unsuccessfully treated as such, among these being iron rust and spots made by argyrol. Any stain that does not come out in the regular washing process, especially where there has been a bleach bath, is apt to be something other than a blood stain.

Next in frequency on certain classes of goods are medicine stains. If a stain has been made by a corrosive compound, such as carbolic acid, the fabric may be so much weakened that any attempt to remove the discoloration will merely result in a hole; hence, there is no wisdom in wasting time on it. Bad scorch stains and old mildew stains belong in this category.

Removal of Medicine Stains

Stains made by organic medicines, if not too old, usually come out in the ordinary washing process, especially if there is a bleach bath. This includes iodine stains, but here I would caution the reader against making the error of mistaking argyrol stains for iodine. Organic medicine stains that do not come out in the wash may be removed by a local treatment with a weak solution of javelle water. The stock solution should be diluted fifty parts and either neutralized with an acetic acid solution or rinsed out thoroughly; otherwise a tendering of the fiber will be the result.

Stains made by inorganic medicines which contain the salts of iron, silver, etc., should be treated locally with a weak solution of potassium cyanide. One-fourth ounce of crystals to a quart of water should be used, and it should be labeled poison.



The small drying tumbler is a most efficient piece of apparatus for drying bath towels, underwear, hosiery and various other articles. This one is located in the Misericordia Hospital, New York City.

The medium size flat work ironer is an excellent machine to install where there is not enough volume to keep a larger one busy or to help out a larger machine where the volume slightly exceeds its capacity. This machine is a part of the equipment of the laundry of the Misericordia Hospital, New York City.

This treatment converts the metals to cyanides which are soluble in water and therefore will wash out.

Nitrate of silver stains and those made by argyrol and other nitrate of silver compounds usually may be removed by use of javelle water. Any that do not respond to this treatment should be treated locally with the solution of potassium cyanide and then with a mild solution of ammonia, the latter to prevent the stain from reappearing.

There are very few food stains and table beverage stains that do not yield to the ordinary washing process; hence, it is hardly necessary to discuss these. Any that may not come out in the wash will respond to a local treatment with a weak solution of javelle water. Heavy greases that do not wash out may be removed by use of gasoline, naphtha, carbon tetrachloride, chloroform and various other solvents.

Stain Removal an Interesting Study

The removal of stains is an interesting study, and the laundry manager who devotes a little time to it will be well repaid. There are several good textbooks on this subject, and one may establish a small laboratory at a very small cost. In fact, practically everything that one will need may be obtained from the hospital pharmacy.

Paradoxically, the removal of stains is called "spotting"; that is, while the careless person who makes the spot is really the spotter of the defaced article, nevertheless the person who removes the spot is called the spotter.

The reader will do well to remember that what I have said applies only to white cotton and linen fabrics, not to colored ones, and not to woolens and silks. The principles are the same in case

All-metal washing machines, with direct-connected electric drive on each, are in use in the laundry of the Misericordia Hospital, New York City. The clock-like dials on top of the machines are instruments that automatically indicate the amount of water that has been admitted to the machine.

of all kinds of goods, but a chemical that may be safely used on one kind of fiber may ruin another.

The handling of spots is largely a matter of ingenuity. For instance, not long ago I visited a hospital where the nurses wore plain blue uniforms. There was considerable complaint because the laundry was washing the color out of the uniforms, and the nurses were much displeased because white spots were frequently made in garments that had not lost their color at all.

I diplomatically approached the manager of the hospital laundry on the subject and he complacently informed me that the grade of blue goods used was bound to fade after repeated washings, which was quite true. He then explained that the white spots were of necessity caused in the removal of various stains; this also was true.

"But," I asked him, "why not restore the blue color by the very simple expedient of giving the uniforms a heavy bluing bath?"

"I never thought of that!" was the reply.

ROCHESTER AS A HEALTH CENTER

Rochester, N. Y., will erect a municipal hospital to adjoin the new medical school of the University of Rochester which was made possible eighteen months ago by the combined gifts of John D. Rockefeller and George Eastman of the Eastman Kodak Company.

The board of trustees of the University of Rochester, after eight months' consideration, recently selected a new site for the medical school, and the new city hospital will be erected on grounds adjoining it. The project has the unanimous endorsement of university authorities.

In June, 1920, John D. Rockefeller and Mr. Eastman gave the University of Rochester for its school of medicine gifts aggregating $9,000,000. Last spring Mrs. Gertrude Strong Achilles and Mrs. Helen Strong Carter of Rochester gave another million for the hospital of the medical school as a memorial to their parents.

With the two hospitals in such close proximity, it is believed that Rochester will become a health center of importance. The university medical faculty will be able to utilize the interesting cases in the municipal hospital, it is declared, and the city hospital and the university medical school will be of mutual benefit.

DEMANDS ON HOSPITAL SOCIAL WORKERS

As the member of an athletic team knows the give and take of team play, so must the medical social worker be able to play the game with hospital, medical staff, patient and outside agencies in driving toward their common goal, the better health of the community. So writes Miss Marguerite Wales, R. N., director of social service, Stanford University Clinics, in an article in a recent issue of *The Pacific Coast Journal of Nursing.*

Although the hospital is primarily a place to heal the sick, it must also be remembered, Miss Wales writes, that it is a great teaching center. With this idea in mind the hospital social worker should appreciate the responsibility that falls upon her. In her department the student nurse gets her only idea of social work and she should receive there as thorough and conscientious training as she does on duty in a ward, in the diet kitchen or the operating room. She should learn something of the technique of social service, how best to approach the patient's home difficulties and how to consider the patient in relation to his family and community. Most important of all she should receive some inspiration for further study in social and public health work after her hospital training is completed.

To make the doctor's service more effective the social worker should supplement his work, seeking data in the patient's surroundings which may be of value to the doctor in diagnosis, and aiding him in carrying out his plans for treatment and education in hygiene.

In the private family there is always some individual who is capable of working out plans with the doctor. Though harrassed with worry still this intelligent person discusses plans with the doctor with an appreciation of the need of foresight and with mutual understanding. The social worker must be the intelligent member of the clinic patient's family. Often the family is foreign born and highly emotional and so completely upset that its members can think only of their immediate distress. The doctor is unable to get any reasonable consideration of what he proposes to do. The social worker must fully understand the doctor's plan for the patient and help the family understand it; but first she must have the complete confidence of the family.

Realizing that the patient's bodily illness has made demands upon him beyond his powers of adjustment, it is the task of the social worker to use her training and experience to work out a plan either to improve the condition of the patient himself or to adjust his environment to his needs. How best to get at the secret of his failure depends upon the amount of confidence the social worker is able to inspire in him. If she comes as a nurse or the doctor's representative there are no artificial barriers and the patient is instantly ready to discuss with her his every difficulty.

Every medical social worker should have some actual experience in public health work—in the visiting nursing side of it. Dr. Cabot says the frontier separating the visiting nurse and the medical social worker should be rubbed out and the two groups become fused. The hospital social worker must know and sympathize with the limitations of a home and have a fine conception of what the patient's obstacles really are.

CONFINING NOISE IN THE HOSPITAL TO ITS SOURCE

By RICHARD RESLER, Resler & Hesselbach, Architects and Consulting Engineers, New York

ARCHITECTS and engineers are usually restricted in designing and planning new hospitals on account of limited building funds. Therefore, it is precluded that the utilization of recognized double wall soundproof construction and soundproof floors, to meet the common request for quiet, must be abandoned as too costly. Consequently to arrest the transmission of noise in a hospital is a well nigh impossible accomplishment for an architect or an engineer to achieve in connection with hospital planning.

In a modern fireproof hospital of steel construction, with its masonry walls and concrete floors, hard plaster, tiled partition walls enclosing a maze of plumbing and heating pipes, and with its absence of carpets, upholstered furniture and hangings, the natural tendency is for the walls and frame of the building to become veritable sounding boards which readily transmit and magnify noises throughout the hospital.

Noisy Departments in Separate Units

This difficulty, however, can be overcome to a great extent by assembling the various disturbing departments into separate units which will confine the noise as far as possible to the locality in which it originates. This result can be accomplished without great expense and without utilizing much more floor space than would be normally required.

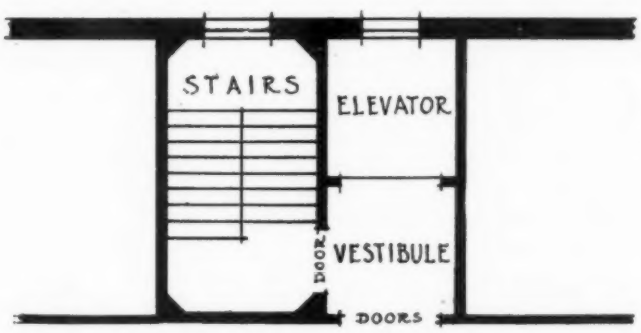


Diagram A.

Obviously, this treatment of the problem would be of no avail should the institution be located on a noisy thoroughfare with heavy traffic constantly passing, but fortunately very few of our hospitals are so situated. Therefore, in this article reference will only be made to noise developed within the building proper.

The most pronounced disturbance in a hospital is primarily the noises which emanate from the patients themselves and from the hospital personnel in the service departments.

Noise caused by the patients can be somewhat alleviated in a practical manner by a careful selection and utilization for partition construction of standard materials embodying soundproofing qualities. The relative soundproofing qualities of various types of terra cotta, gypsum and other partition materials have been covered in comprehensive reports of tests conducted by well known acoustical authorities and reference thereon can be readily made.

Vestibules Will Diminish Sound

The noise, however, originating in the service departments, the stairs and elevator, such as the clattering of cutlery, pans and dishes in the diet kitchens, the handling of utensils and the flushing of plumbing fixtures in the porter's room, the handling of bedpans and utensils in the utility room and the elevator and stair traffic, is of an entirely different character and cannot be so easily overcome owing to the usual location of these rooms directly on the corridor. During certain periods of the day when the traffic is greatest, the doors are open for long intervals. By the construction of a vestibule between room and corridor, thus requiring passage through two doors, the noise can be sufficiently confined to its source so as not to be a disturbing factor to the patients within the building.

It is now common practice in our new hospitals to place stairs and elevator adjacent and enclose them both in one shaft with a common vestibule, as shown in Diagram A. This vestibule should be planned of sufficient length to contain the stretcher and allow the corridor doors to close while the stretcher is stationed in the vestibule awaiting the elevator. The results attained in this manner have been most satisfactory.

To prevent the transmission of noise from the service departments to the rest of the building, the writer has recommended for a long time the further carrying out of this principle wherever possible by grouping the allied service depart-

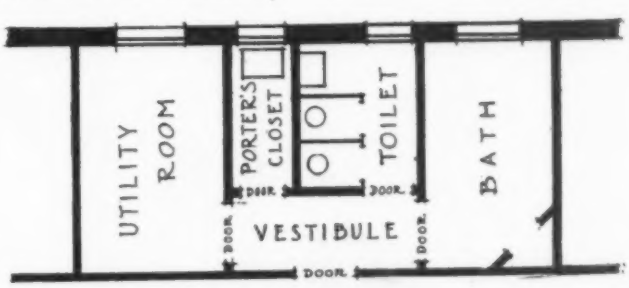


Diagram B.

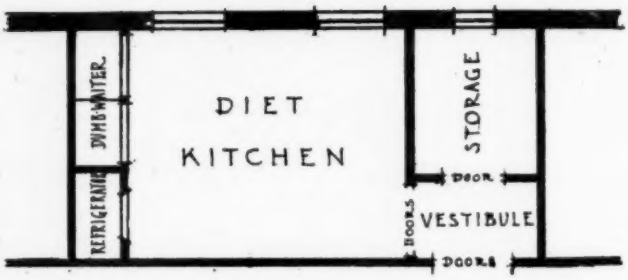


Diagram C.

ments into various suites, each suite to be entered through a common vestibule. This arrangement has the further advantage of preventing the permeation of the building with kitchen and toilet odors.

For instance, the utility room, toilet, bath and porter's closet could be combined into a separate unit with a common vestibule. The diet kitchen and storage room could be similarly treated. This classifies the different functions of these units and still maintains them separate and distinct from each other. Reference is made to Diagrams B and C, respectively.

It is the usual practice, in order to provide an economical plumbing and heating arrangement, to place the service departments over one another on the various floors so that dumbwaiters and pipe stacks are vertical and continuous. Consequently, noise emanating in one service department, provided it is confined, will travel up or down to the other without transmitting disturbance to the rest of the institution.

Delivery Suite Should Have Double Walls

However, the conditions encountered in planning a nursery and delivery suite are totally different. These are at times the noisiest of all departments and are usually located on one floor only, being surrounded by patient's rooms. As the ordinary partition construction is not satisfactory in a situation of this kind, the writer suggests the use of double wall soundproof partition construction augmented further by a common vestibule. Reference is made to Diagrams D and E, respectively.

In view of the common request and appeal for quiet which greets one in all hospitals, either by

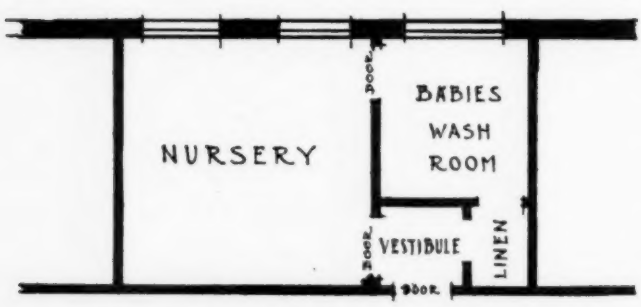


Diagram D.

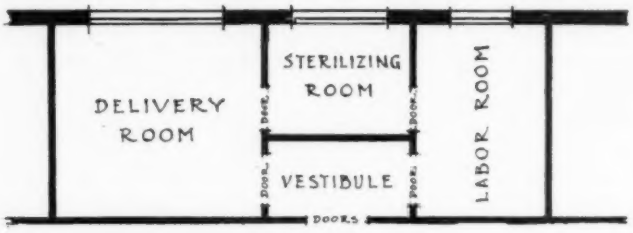


Diagram E.

legends on the walls or otherwise, it seems that by an economical and practical arrangement of the various units in a hospital much of the existing criticism can be overcome.

NURSING SCHOOLS FOR DAUGHTERS NOT FOR MAIDS

Boards of managers should make their schools of nursing places where they will be eager to send their daughters instead of their maids, says Miss Amy M. Hilliard, R.N., of Troy, N. Y., in an article on "Responsibilities of Boards of Trustees and the Community to Schools of Nursing" in a recent issue of *The American Journal of Nursing*.

"Trustees should acquaint themselves in detail with the essential factors for the development and maintenance of a school of nursing; they should see that it is comfortably housed, and in connection with a hospital that has not only gained the confidence of the public, but is ranked in Class A by the American College of Surgeons and the state boards of charities. They should see that the finances of the school will make possible the appointment of a strong teaching staff and the development of reasonable social, educational and recreational activities outside the hospital,—in other words, they should make the school a place where they will be eager to send their daughters instead of their maids."

Miss Hilliard declares that lack of money has been the chief obstacle in the path of developing schools of nursing and has been the cause of much unnecessary sacrifice of student nurses. In reality, she says, the hospital is a hotel for the sick. It has all the expense of maintenance of other hotels plus that of medical attendance, nursing attendance, special departments, etc. But what proportion of patients, she asks, expect to pay even the same amount for hospital accommodations as they would be obliged to pay for hotel accommodations in the same city?

The first consideration for a successful school of nursing is that it rest upon a firm financial foundation, Miss Hilliard says; the next is its faculty. No school can ever be better than the leadership given it. The principal must be selected with as much care as the principal of any other professional school. It is the solemn duty of board members to find a woman of good professional education and executive ability and not to appoint someone because she has acceptably taken care of their children, because she gets on well with the doctors, or is a good surgical nurse. The accepted standard curriculum prepared by a large group of nurse educators can only be adopted if the school has an adequate and well trained staff of instructors.

It is the responsibility of the community, Miss Hilliard writes, to see that schools of nursing have the necessary status educationally and legally to place them on a firm foundation so that their product, the graduate nurse, will not be forced to meet on an almost equal footing the graduates of short course schools.

WHEN TERMINAL DISINFECTION AFTER INFECTIOUS DISEASES SHOULD BE EMPLOYED

By D. L. RICHARDSON, M.D., Superintendent, Providence City Hospital, Providence, R. I.

THE subject of terminal disinfection after infectious diseases is of widespread interest to hospitals and the public. No more frequent question is asked concerning isolation of contagious patients than what to do to the patient and room at the termination of the disease.

This paper will be confined to disinfection after scarlet fever, diphtheria, measles and diseases which we know postively are transmitted by contact.

"Fumigation, as ordinarily applied in terminal disinfection, accomplishes very little and is unnecessary. Too much stress has been placed upon contaminated surroundings and too little upon the patient himself or upon those persons whom he has exposed. In contact diseases the whole room occupied by the patient is not contaminated and fumigation serves no other purpose than to appease the conscience of hospital authorities, health officers and the public. The chief source of infection in contact diseases is not environment but direct and intimate contact with the fresh secretions or excretions of persons who are suffering from disease in a frank or unrecognizable form and with carriers."

Terminal disinfection after insect-borne diseases, such as typhus fever, yellow fever and malaria, is quite unnecessary except to destroy infected insects. Isolation in such diseases should aim to prevent insects from becoming infected by the patient, and infected insects from biting well persons. Germs of such diseases are carried in the bodies of infected insects and contact with the patient offers no danger unless infected insects are about. Terminal disinfection after these diseases should be confined to measures to kill all insects in the quarters occupied by the patient.

The contact diseases constitute quite another problem. During the course of the illness the virus escapes from the body either in secretions or excretions of the body or in wound discharges. These are likely to be spread about more or less generally unless great care is taken to prevent that practice, so that theoretically any small or considerable portion of the room occupied by a patient or its contents may be contaminated.

Whole Room is not Contaminated

From a practical point of view, however, it has been found by experience that the whole room and its contents are not contaminated. The things which are most likely to be a source of danger are those which most probably have been soiled by the secretions or excretions and discharges, such as the pillow, the bed clothing, the nursing utensils, bedside table, the chair or chairs occupied by the patient or nurse, the wash bowl and toilet, toilet articles, door knobs, etc. It also must be realized that different objects are contaminated to varying degrees. Germs die rather promptly after leaving the body, and while the process of contamination goes on during the illness the virus is also being constantly killed by drying and by sunlight. As convalescence is established, the number of germs discharged from the body constantly decreases so that at the end of the established period of isolation the patient is quite harmless, except in the case of a small percentage of persons who become temporary or permanent carriers. It usually follows, then, that the infection which reaches various parts of a room early in the disease is quite dead, and that a room occupied throughout the entire course of the disease in most instances is harmless at its termination. On the other hand if the patient dies or is transferred to another room during the acute process of the disease, the vacated room is a much greater source of danger.

This more rational view of room contamination is gaining rapid headway. In the minds of those who still cling to the idea of aerial transmission of disease, the whole room occupied by a patient is a hot bed of infection. Careful observation in the hospital and home prove this view is not tenable.

Fumigation Only Appeases Conscience

Fumigation is no longer thought to be necessary and serves no other purpose than to appease the conscience of hospital authorities, health officers and the public. In March, 1905 Chapin in Providence ceased fumigation after diphtheria unless it was requested by the family. In his annual report for 1908 he statistically shows that there had been no greater recurrence of the disease in homes after discontinuing disinfection than before. In November, 1908 he ceased fumigation after scarlet fever and subsequent experience confirmed the fact that it was not necessary

after this disease. Since that time gaseous disinfection after contact disease has been quite generally abandoned in the United States although it is still practiced in many communities and hospitals.

That gaseous disinfection is at least unnecessary, hospital experience has conclusively shown. Since the opening of the Providence City Hospital in 1910 no fumigation has ever been done. There has been no evidence in a single instance that thorough cleanliness of the room and contents was not entirely sufficient. A detailed study of this may be found in an article published by the writer in 1913-1914 Vol. I, pp. 70-80 of THE MODERN HOSPITAL. It is obvious from this study that no child who contracted an infectious disease in the hospital did by any stretch of imagination pick up the infection from the room which had been previously occupied by the patient suffering from the same disease. The same procedure has been carried out for the prevention of ambulance infection and there is no evidence that any ambulance has ever been a source of disease.

In terminating isolation it should be emphasized that the patient is a far greater potential danger to others than the room he occupied during his illness. He may be a carrier, diphtheria, typhoid or scarlet fever, as the case may be. It is a very difficult problem to free him from such infection; certainly it cannot be done by any kind of a bath. The room and its contents however are quite free from infection by the time the patient convalesces in it. If, as has been stated, the patient is sent to the hospital or dies in the acute process of a disease, then the possibility of room infection is of some importance. It is not contended that room infection might not be possible, particularly if contents may be smeared with secretions or excretions, but it is strongly maintained that such a source of infection is very slight and that the importance of terminal disinfection has been much exaggerated. If the excretions and secretions of the patient have been promptly disposed of and strict cleanliness observed during the nursing of the patient, room infection is trifling.

Terminal disinfection applies first to the patient, secondly to the room and its contents.

It is very proper for the patient to have a bath on discharge; but any infection carried on the surface of the body is not to be compared to the possibility of germs being carried in the nose and throat or intestinal tract. A bath of soap and water, including a shampoo, is quite sufficient. It is not of sufficient importance to require the use of chemical solutions. In the hospital a patient should receive the terminal bath a day before discharge and be placed in a "clean room" so that he will not be sent out of doors before he has had time to dry satisfactorily. This is particularly important after scarlet fever, for exposure may set up rhinitis and if the patient is still a carrier a discharging nose renders him much more infectious. After the cleansing bath the patient should put on clean clothing and the infected clothing be left in the room.

The treatment of the room after discharge of a patient differs in the home and in the hospital. Terminal disinfection of a room in the hospital will first be described. It is assumed that the room has been occupied by the patient alone. The patient's washable clothing, the bed linen, towels, etc., should be collected into a bundle and sent to the laundry to be washed. Mattresses and pillows should be put out in the sun for at least six hours. If the patient dies in the acute stage of the disease or is transferred from the room while acutely ill, or if the clothing is obviously soiled, it should be sterilized by steam under fifteen pound pressure for thirty minutes. Continued sterilization by steam injures the fabric so that mattresses and pillows soon become very much damaged. It is found that sunning in the open air is under ordinary circumstances quite sufficient. Such textile clothing of the patient as is not washable should be hung out in the sun for at least six hours. Shoes, belts, gloves, rubber goods, money and other valuables may be washed with soap and water and air dried, preferably in the sunlight. Magazines, papers and books, should be destroyed or pinned up in a towel and sterilized by steam. All nursing utensils not damaged by heat should be boiled for at least ten minutes. Thermometers and other small articles can be submerged in 70 per cent alcohol solution or of phenol 1-60 for half an hour. Toilet articles should be washed with soap and water and air dried. The bed, bedside table, chair, bell cord, lavatory, door knobs, curtain cords and the wall about the lavatory and window should be washed with soap and water.

If the patient sick with an infectious disease is in the same room with other patients, it is very important to ascertain whether the other patients are immune to this disease. All those who are susceptible should be isolated separately during a period equal to the incubation period of that disease. The first patient should be isolated as soon as discovered, preferably in a separate room. After his removal disinfection should be carried out just as described above except washing of the walls. The mattress, pillow, bed linen, nursing utensils may be moved with him to the room where he is isolated if it is in the same ward. It is not necessary to clean the whole room or to subject other patients in the room to the

same procedure, but the latter should be watched carefully so that symptoms may be detected at the earliest possible moment.

Disinfection in Home More Complicated

Terminal disinfection in the home is more perplexing because of the presence of many articles of furniture, draperies, shades, carpets, rugs and the like. Again it should be emphasized that the room as a whole is very slightly infected. It is not necessary to destroy these things nor subject them to a damaging process of sterilization. Neither is it necessary to repaint and paper the room.

Methods of disinfection as described for a room in an institution are applicable in a home, including of course the cleansing bath of the patient. The mattress and pillow, blankets, draperies, rugs, etc., should be put out in the sun for at least six hours. Furniture and woodwork can be washed with soap and water, employing a neutral soap so that the finish will not be damaged. Attention should be paid also to the bathroom and fixtures and especially to utensils used by the patient or his nurse, as already described. Utensils which are boilable should be boiled in a pan before being washed. All the linen in the room should likewise be boiled before washing. After airing for twenty-four to forty-eight hours the room is quite safe for any one to occupy.

It is quite right that terminal disinfection should be carried out faithfully but outside of the bed, bed linen and nursing utensils, possibilities of infection are very slight. These methods of disinfection are really of value, but fumigation as ordinarily applied accomplishes very little and is unnecessary. Too much stress has been put upon contaminated surroundings and too little upon the patient himself or those persons whom he has exposed. The chief source of infection in contact diseases is not environment but direct or intimate contact with the fresh secretions or excretions of persons who are suffering from diseases in a frank or unrecognizable form, and with carriers.

CALIFORNIA PUBLIC HOSPITAL OPERATES UNDER SLIDING SCALE

By HERBERT O. COLLINS, M.D., Director Fresno County Hospital, Fresno, Cal.

Fresno County, California, has in operation a sliding scale of charges for part pay patients. As is well known there a number of so called public hospitals which although they do not admit the ordinary pay patient, nevertheless makes a small charge to patients who should not be admitted free.

To establish a definite rate for patients often works a hardship on some, and admits others for less than they can really afford to pay. When a sliding scale is adopted and its application left to the unsupported judgment of a social worker or other employe, charges of favoritism are likely to be made, against which defense is difficult.

For those who can afford to pay a little towards their hospital care and for our own protection in refusing admission to some whom we think could afford a private hospital, we have recently worked out the sliding scale of charges printed below.

This scale of charges is not by any means to be considered as inflexible, as the social worker who passes on admissions, is left free to take into consideration all the circumstances of the case, as to whether the patient is the wage earner of the family, the amount of savings the family may have to help tide them over the time, sick insurance, etc. The "scale" therefore is only to be used as a basis of judgment so as to take the process of fixing fees as far as possible away from the field of guesswork.

The amounts designated as the minimum required for existence are based on the computations of Prof. Jaffa of the University of California. Taking Prof. Jaffa's estimate of the minimum sum which should be spent for food for individuals of a given age, and using this as 45 per cent of the total amount required for food, shelter and clothing, we arrived at the necessary family budget. This, however, allows no margin whatever for "extras," such as sickness or hospital bills, and any cessation of income would force the family to seek charity aid. We have added $10 to this income and have used this as the minimum or starting point from which to classify our "pay" patients. Persons having an income below this amount are admitted free.

With this as a basis, Groups, A, B, C, D and E, paying $5, $7.50, $10, $12.50, and $15 per week respectively, and Group F, considered as ineligible for admission to a public hospital, because of apparent ability to pay the regular private hospital fees, have been scheduled at $10, $20, $30, $40, $50 and $60, respectively above the minimum required for existence, according to the schedule. Judgment must be exercised on each individual case.

Charges per week	F Not eligible	E $15.00	D $12.50	C $10.00	B $7.50	A $5.00	Free	Estimated minimum required for living
Man, single	Over (per mo.) $105.00	Over $95.00	Over $85.00	Over $75.00	Over $65.00	Over $55.00	Income below Class A	$45.00
Woman, single	$100.00	$90.00	$80.00	$70.00	$60.00	$50.00		$40.00
Man, woman and baby	$140.00	$130.00	$120.00	$110.00	$100.00	$90.00		$80.00
Man, woman and three children	$190.00	$180.00	$170.00	$160.00	$150.00	$140.00		$130.00
Man, woman and five children	$240.00	$230.00	$220.00	$210.00	$200.00	$190.00		$180.00

THE QUALIFICATIONS AND TRAINING OF HOSPITAL SUPERINTENDENTS*

By A. C. BACHMEYER, M. D., SUPERINTENDENT, CINCINNATI GENERAL HOSPITAL, CINCINNATI, OHIO

THE trend of popular opinion in favor of institutional care for the sick and injured has kept pace with the progress that has been made in the science of medicine, and the public is rapidly becoming aware of the advantages and necessity for adequate hospital facilities. While the growth and development of hospital service during the last fifty years have been most remarkable and have been particularly rapid during the last few years, it is nevertheless true that the present demand for hospital facilities in many instances far exceeds the supply. The number of hospital beds consequently continues to increase very rapidly and greater expansion is evident.

Though the principal function of the hospital continues to be the care of the sick and injured, additional equally important functions have been developed and today it serves or should serve as the community health center. The hospital, regardless of its size, type, location or affiliation, must function as an educational institution, not only to physician, nurse, sociologist, etc., but to the public in general and should also serve as a field for research if it is to occupy its proper position in the community.

The following statistics concerning the extent and scope of hospital service in the United States at the beginning of 1921 have been courteously supplied by the Modern Hospital Publishing Company.

	1873	1920	Increase
Number of hospitals	149	7,667	5,045%
Number of hospital beds	35,453	695,698	1,862%
Population of United States	38,558,371	105,683,108	194%
Average bed capacity	238	91	

Classification by bed capacity—1920

	Hospitals	% of total
Under 25 beds	3,110	40.56
25 to 49	1,859	24.24
50 to 99	1,263	16.47
100 to 199	781	10.19
200 to 499	405	5.28
500 to 999	116	1.52
1,000 and over	133	1.74
	7,664	100.00

*Read before the annual Congress on Medical Education Licensure, Public Health and Hospitals, Chicago, March 10, 1922.

"A course of training for hospital administrators should primarily give the student inspiration and viewpoint. He should be led to think of the hospital in terms of its relation to the community, to the medical and nursing professions, and to society in general. He should be taught how to interpret the hospital's functions to these groups and co-incidentally (but as thoroughly as possible) be instructed in business administration and in those more or less mechanical and clerical duties of the executive. After a period of twelve or eighteen months spent in intensive didactic and practical instruction, the student should spend further time in an apprenticeship, not however without remuneration."

Eighty-one per cent or 6,232 hospitals have a capacity of less than 100 beds. The distribution of these 7,664 hospitals is shown by the following statements.

In 1920 there were 69 cities of 100,000 population and over, having 1,419 hospitals; 73 cities of 50,000 to 100,000 population with 456 hospitals; 375 cities of 10,000 to 25,000 population with 980 hospitals; and in communities of less than 10,000 population there were 2,960 hospitals. Less than one-fourth of the hospitals of the country are located in cities of over 100,000 population. Only 29 per cent of our institutions are in communities of over 50,000 inhabitants.

These figures are presented in order that we may bear them in mind when considering the subject under discussion. Particular attention is invited to the large proportion of small hospitals, that is, those of less than 100 bed capacity; also to the fact that the majority (187 out of 249) of those of over 500 bed capacity are devoted to the care of persons suffering from mental and nervous disorders.

The importance of the small hospital, when considered in relation to the community it serves, can scarcely be overestimated. Communities of 5,000 population and less are rapidly developing some form of hospital service and are extending that service to the adjacent rural districts. In such communities, the hospital is a vitally important agency in civic welfare. The many discoveries and advances that have been made in the science of medicine, and in the fields of nursing and public health as well, have also served to make the hospital a most important agency in the community.

Because of this hospital administration has become a specialized field of endeavor, calling for executives who can administer the many details of internal organization and who can interpret the institution to the community in terms of service, and by popularizing it increase its usefulness.

The source of supply for executives for these

institutions is very indefinite. Boards of trustees are constantly confronted by the problem of finding suitable officers for their institutions (if one may judge from the number of requests that daily find their way to the desks of the officials of the American Hospital Association, editors of hospital journals and many hospital administrators). While the number of such requests for executives is one index of the situation and probably the most definite that we have, it alone does not indicate the need for a course of training for superintendents. Some one has said that "an increasingly larger number of medical men each year go or drift into administrative work" and the same may be said of nurses and laymen. Because of this "going or drifting" and because in many instances boards of trustees are not cognizant of the proper functions of a superintendent, many institutions are not playing their proper role in the life of the community they seek to serve and are not being properly and efficiently administered.

Considerable thought has been given to a contemplated course of training for hospital superintendents, but as yet opinions and plans have not been crystallized so far as extent of studies and methods of instruction are concerned. A number of individuals throughout the country have been giving attention to the subject and the Rockefeller Foundation is supporting a committee which is now engaged upon a study of the subject, but no definite program has as yet been prepared. The only way in which physician, nurse or layman can enter the field with any training or experience is by means of an apprentice system, in which he or she serves as assistant in one of the larger hospitals for a number of years or enters the hospital employ in some minor capacity and then by promotion wins the superintendency. The number who in this way become available for executive positions each year is very small.

If our colleges can prepare men for other professional and technical vocations they certainly should be able to prepare men and women for administrative positions in our hospitals.

Qualifications of An Administrator

Before entering upon any discussion of a program of training we should endeavor to define the qualifications of a hospital administrator.

The duties of a superintendent have been described on various occasions and the question of his qualifications has likewise often been the subject of discussion. It is difficult, however, to define those qualifications, having in mind the diverse nature of our hospitals and the facts that about 81 per cent of them are of less than 100 bed capacity and that the principles upon which the administration of a hospital of any kind must rest have not as yet been definitely formulated.

One may, however, conclude after careful consideration and from the various papers and the reported discussions that a hospital superintendent should be a mature individual, of clear mind, broad vision and good perspective, having executive ability and initiative. He should possess sufficient knowledge to direct and coordinate intelligently the work of a rather intricate organization and be capable of correlating the hospital with all other agencies in the community that have to do with public health, philanthropy and with medical and nursing education. If in addition to these qualifications the individual possesses a medical education, he has an added advantage, but this is not an essential qualification. It is, however, necessary that he possess a "medical point of view." Personality will play the same important role that it does in all other walks of life. This definition is a rather broad one, but it is applicable to the executive officer of small or large institution.

Purpose and Aim of Training Course

It should be the purpose and aim of a course of training for hospital executives to fit men and women to meet these requirements, and a clear vision of the desired goal should be kept in mind in preparing the course of study. The training should primarily give the student "inspiration and viewpoint." He should be led to think of the hospital in terms of its relation to the community, to the medical and nursing professions and to society in general. He should be taught how to interpret the hospital's functions to these groups and co-incidentally (but as thoroughly as possible) be instructed in business administration and in those more or less mechanical and clerical duties of the executive.

The course of training should first be considered as a whole, and then subdivided into such units or divisions as may be easily administered from point of view of instruction. The many subdivisions must be carefully coordinated and care should be exercised to avoid any endeavor that would seek to make the student an expert in all or any of the subjects covered. In presenting this discussion I am considering the training course as a separate entity and not as part of the curriculum of a school of public health or hygiene, though it might readily be made such. Future development may lead to a more extensive course than that contemplated in this paper and then such affiliation might be highly desirable.

Because of existing conditions, the limited remuneration now being paid the majority of superintendents, the varied type and size of institutions, the course should be restricted to a rather

short period of time. It has been suggested that for these reasons the instruction should not extend over a period of more than twelve or at most eighteen consecutive months. This is probably as long as most of those who have inquired concerning such training could financially afford to spend in preparation.

This precludes the development of any such extensive course for training hospital executives, as that outlined by Mr. Atkins of the University of Chicago for the training of manufacturing executives. If, however, we bear in mind that it is intended to teach so far as possible the elements of hospital administration, to give the student an insight into the various problems and diverse aspects of institutional management, to give him a "point of view" and enable him to give an "ideal worth" to his work, it should be possible to prepare a program of intensive instruction that would provide a broad fundamental training.

Because of the short period of training, the requirements for admission thereto should be carefully considered. Believing that a medical education is of distinct value to the otherwise capable executive, but not an indispensable qualification, I do not believe that matriculation should be limited only to graduates in medicine. Having in mind the statistics concerning hospitals, quoted above, and the very important position of the hospital in the life of the community, we should require that the matriculant possess a broad, general background of preparation. He should have a general knowledge of the business, social and economic world and a degree of maturity of mind commensurate with the position sought. It would probably be well to require that, in addition to such actual school credits as would permit of matriculation into a college of liberal arts, the student have training and experience equivalent to a college degree, and also demonstrate by credentials or otherwise that he possesses some degree of executive ability. Such an outline of requirements necessarily infers that the director of the course must exercise careful discretionary powers and that the admission or rejection of applicants ultimately must rest with him.

Outline of Proposed Course

The development of a course should be as recommended above, to consider first the program as a whole and then subdivide it into such units as are necessary from the point of view of instruction.

It is necessary that the schedule be an elastic one in order that students possessing adequate knowledge of one subject need not spend as much time in the study of that subject as would those not familiar with it and in order that he might instead devote more time and attention to some other phase of the work.

If, at the same time, an arrangement could be effected whereby certain subjects could be covered within a short and definite period of time, special students could be admitted who desire instruction in but one subject. There was such a demand during our brief experience several years ago.

I shall not endeavor to describe definitely the content of the course or extent of the instruction to be given because experience alone, I believe, will indicate how much or how little should finally be included in the course. It would be well to begin with a minimum and permit the training through experience to develop gradually along definite lines.

Dr. S. S. Goldwater, in an article entitled "Self-Education for Hospital Executives," presented an extensive outline of a system of instruction and training which would serve as an excellent foundation for the development of a program.

The present plan at the University of Cincinnati contemplates such development. It is the hope that beginning in the fall of this year a course will be established which will follow Dr. Goldwater's outline and include the following subjects:

1. History:
   - Origin and development of hospitals
   - Extent and scope of hospital service, foreign and domestic
   - Nursing service
   - Dispensary Service
   - Clinical medicine
   - Laboratory sciences
   - Medical education.

   This group of subjects to be covered by different instructors in a general way, dwelling briefly upon history, present practices and tendencies and apparent future development.
2. Sanitation and hygiene:
   - Principles and Application.

   It is not contemplated that the student be taught with the detail ordinarily given to the medical or public health student, but a more general idea of the principles involved and their relation to hospital practice. Instruction should be given in food inspection, clothing, ventilation, heating, drainage, etc., and in epidemiology, disinfection and quarantine.
3. Biometry:
   The instruction under this subject to be so designed as to give the student an intelligent idea of methods of statistical studies and an ability to interpret such studies rather than the detailed instruction necessary to undertake such work. He should learn what statistics a hospital should compile and the methods that can be used.
4. Sociology:
   Time will not permit of any extensive instruction in this subject. The student should possess a general knowledge of the subject before entering upon the course. The instruction should deal more especially with medical social questions, as related to hospital practice.

5. Jurisprudence:
   Instruction under this subject would in a general way cover contracts, evidence, etc., but more especially outline those legal affairs more closely related with hospital administration, such as the hospital's responsibilities to its patients and visitors to patients, its relation to medical and nursing practice; it also acquaints him with those sections of the various state codes applying to organization and operation of hospitals.
6. Business science:
   The instructors here should endeavor to impart a general knowledge of business principles, giving the student something of accounting, banking, definitions and methods of handling capital and operating accounts, administration of trust funds, etc., of cost accounting as applied to hospitals, of budget making, of purchasing and of methods and practices in labor management.

   As a result of this course, the student should at least be enabled to know what to expect of a bookkeeper, what statements to call for and how to analyze and evaluate them; how to purchase properly; how to operate a store or supply room and go about the employment and management of hospital personnel.
7. Domestic science:
   It is contemplated that under this subject the student will be given the principles and methods of food preparation and cooking, of kitchen management, of the analysis of food and its value in health and disease, and instruction concerning clothing and linens, laundry processes and housekeeping practices, so that he may intelligently supervise the work of subordinates.
8. Building and power plant operation and maintenance:
   This subject should cover instruction concerning the maintenance of lands and buildings, operation of power plant, fuel consumption and power production, refrigeration, heating and lighting, maintenance and repair of mechanical equipment and appliances and the various economies that may be practiced. All of this should be with the view of giving the student a general understanding of the subject and not with the idea of equipping him as an engineer or mechanic.
9. Administration:
   For lack of a better term, this subject is used to cover such subdivisions as community relations and internal organization, both of which subdivisions must be further divided so as to cover fully the organization and detailed management of the institution. Under community relations the instruction should furnish the student with a proper understanding of what the hospital should mean to the community in general and its relations with all public health, philanthropic and other agencies having to do with the public welfare. Internal organization should cover not only managing boards and domestic departments, but professional services, staff organization, out-patient department management, etc.

Fundamentals Only Can Be Given

The administrator can well utilize all the knowledge he can acquire in any and all of the subjects mentioned, as well as in many others, but time will not permit of more than rather brief instruction in each so that fundamentals only should be given. Proportionately more time would necessarily be given to such subjects as community relations and internal administration and their subdivisions, and through practical training in the departments of different types of hospitals the student should learn methods of application of the instruction given in the didactic courses. It will be impossible to cover any of these subjects in such manner that the student can secure enough information to be considered, even in the remotest sense, to be well informed. It should be every instructor's aim to demonstrate the expanse of each subject to the students and make them realize their own limitations.

Every instructor should be prepared to outline and require students to do extensive collateral reading and ample provision should be made for seminar hours during which the students should be required to lead the discussion.

It would also be well to have a group of prominent hospital administrators serve as special lecturers, each to spend one or more days with the class and in addition to delivering a lecture upon some chosen or assigned topic, lead the discussion in one or more seminar periods.

An affiliation between a group of hospitals of different sizes and types should be effected for the purpose of practical instruction. The students should be passed, by schedule, through the various departments of these institutions in order to observe their operation and learn of the various methods of organization and management. The time spent in each of these departments will probably be too short to permit the student actively to engage in the work or be held responsible for any activities in the department, but if this can be arranged it will react to his benefit. The superintendents of these affiliated hospitals should also serve as instructors or as leaders of seminar periods in order that they may be closely in touch with the course of training, its methods and ideals.

Apprenticeship Should Be Short

After a period of twelve or eighteen months spent in intensive didactic and practical instruction, the student should spend further time in an apprenticeship. This secondary period, however, should not be without financial remuneration and the preliminary training should greatly reduce the time now consumed in apprenticeships before the aspirant to an executive position can be charged with the responsibilities of such office.

Such training should make available to the hospital field, a group of individuals who would be fundamentally trained and thus eliminate the necessity of utilizing as executives persons highly trained in some respects and almost wholly un-

informed in other equally important phases of administration.

In presenting this subject, it is my hope that none will feel that I am submitting fixed opinions or recommendations. My only desire is to stimulate discussion and consideration of what I believe to be one of the most important topics before this conference. The hospital field is becoming an increasingly important one in the life of our nation and if it is to continue to develop and exert its tremendous potential power for good in the progress and upbuilding of civilization we must develop properly qualified administrators.

In conclusion I desire to recommend that the American Conference on Hospital Service, after the publication of the report of the Committee of the Rockefeller Foundation that is now studying the question, take the necessary steps to establish a course for the training of hospital executives in some centrally located university.

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CHECKING UP THE HOSPITAL PHARMACY

By ALBERT S. HYMAN, M.D., Superintendent, Mount Sinai Hospital, Philadelphia, Pa.

FEW departments of the dispensary present greater problems of administration than that of the pharmacy. So far as the small dispensary is concerned there may be few or no difficulties encountered in rendering satisfactory service to patient, doctor, and hospital; but it has long been known that the difficulties found in rendering such a service have apparently increased in the same ratio as the size of the dispensary increases so that the problems of a large dispensary pharmacy may be manifold.

These problems from an administrative standpoint may be roughly classified into three general types: those concerned with the accounting of financial intake from prescriptions sold, those concerned with the accurate checking of all medicines dispensed, and finally those problems concerned with the proper filing and recording of every prescription given out.

In hospitals rendering a prescription service on a stated or fixed fee basis, the financial intake presents no serious accounting difficulties, but where the dispensary draws its clientele from the indigent section of a large city, it becomes necessary to make the fee flexible to a sliding scale. In the latter condition the strict accounting of moneys received may either prove to be impossible or so intricate that its irksome character may be reflected in a lessened capacity for work by the dispensary personnel. In other words, the proverbial "red tape" can cause more harm in this connection than many times the value of the money received.

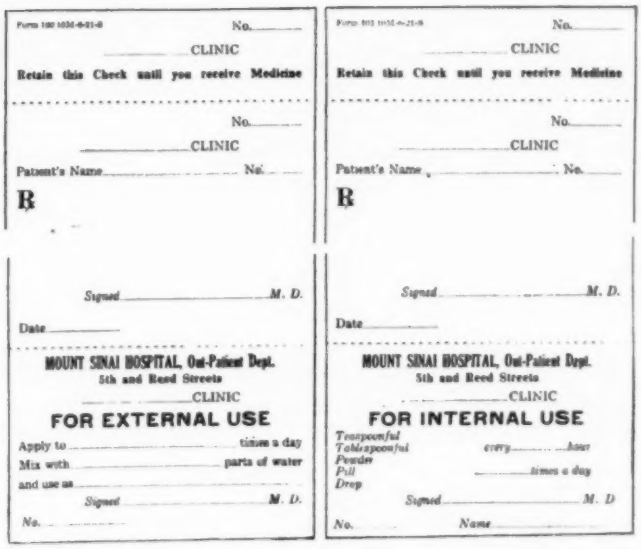
Safeguarding the patient, physician, and pharmacist is, of course, the aim of any checking system that may be installed in the pharmacy. A mistake in any other department of the dispensary may be readily forgiven, but an error in the drug store is said to be conniving with disaster. Fortunately, few mishaps of this kind produce serious trouble since the day of dispensing potent and dangerous drugs for self-administration by the uninformed is practically gone. However, there occasionally arise circumstances whereby the wrong medicine is given to the right patient or the right medicine is given to the wrong patient; in either case there has been a gross miscarriage of administrative duty and responsibility. The anticipation and correction of such a possibility must be at the basis of any checking system that is installed.

Finally, the need for complete recording of all prescriptions issued and their ready accessibility when required for reference form the minimum function of hospital pharmacy administration.

There are many ways of solving the problems which have been presented above. Every dispensary administrator has given much thought and energy to these same problems, and each has developed a method of action which is peculiarly adapted to his own dispensary. Some have evolved a very accurate but laborious program in which additional personnel and many blank forms are required; while others have developed a theoretically correct plan which actually may be impossible to carry out.

A study of the situation has lead us to believe that the more simple the mechanism, the easier it becomes for the dispensary personnel to see that a definite program is adhered to; and in this regard we have found that everything can be accomplished by using one blank form, a facsimile of which is shown on page 343.

This form we have divided into three parts: an upper, middle, and lower. These are called respectively, the check, the prescription, and the



label. The form is adapted for any clinic, the name of the clinic being stamped in the space provided for this purpose. In writing a prescription, the physician in the clinic uses the middle part and also fills out the bottom to which he signs his name. The form is printed on two shades of paper, one to be used for medicines taken internally, and the other for drugs used externally. Both forms are the same except at the bottom where the directions are given.

The patient proceeds to a clerk detailed from the social service department for special work in the pharmacy office. This clerk receives the form and makes a fee according to the financial ability of the patient. The amount is written on the upper and middle blanks and a serial number is stamped on all three divisions. The top is torn off and given to the patient as a "check" for his medicine. The pharmacist then receives the lower and middle blanks and as soon as the medicine is compounded the lower blank is torn off and pasted directly upon the container as a label. When the patient applies for his medicine, he presents his check and the drug clerk having matched the numbers asks the patient's name. In this way a double safeguard is given for protecting both the patient and the hospital from the delivery of a medicine to the wrong person.

So far as the patient is concerned, he is assured of receiving drugs as ordered by the physician, and moreover, the label on the bottle contains the directions in the doctor's own handwriting.

The pharmacist is protected by having on record the original prescription which is filed away numerically each day. He wastes no time in copying either the prescription or the label for the container of the medicine and the opportunities for error are thus minimized. Any prescription can be easily found by the serial number and the first and last numbers for the day give the total number of prescriptions filled.

The auditor's department makes a daily collection and analysis of the checks turned in; the total number of prescriptions, the number given free, those partly paid for, and those fully paid can be rapidly classified. The amount of money received for medicine is easily added up from these checks and can be compared with the actual cash turned in.

This system is offered because of its extreme simplicity and lack of complicated procedures. No originality is claimed for the plan although certain features have been developed which we have not seen in other dispensaries. The universal blank immediately eliminates a large printing bill; the name of the clinic can be stamped in as the blanks are desired. The idea of having the physician fill out his own label appeals both to the patient and the pharmacist; there can be no "passing the buck" in doubtful cases. Much information can be gained from the original prescription; knowing only the serial number of the prescription which is on the label of a bottle which a patient may bring in to refill, one could find out the patient's name and dispensary number, how much he paid for it, who the doctor was, the clinic he was in, and the date the prescription was issued. Altogether, we have found this plan to be very valuable, and it is hoped that others may find something of interest in it.

NATIONAL HOSPITAL DAY PLANS

Hospitals of all sizes and types are showing an increasing interest in National Hospital Day as May 12, the date for the second annual observance of this movement, approaches.

National Hospital Day was originated last year for the purpose of acquainting the public with hospitals and hospital service, and brought many unexpected benefits to the 1,500 institutions throughout the United States and Canada which took part in the pioneer movement. There were innumerable donations of money, supplies and equipment, while a large number of applications were received from high school girls and other young women to whom the "day" so clearly presented the ideals and opportunities of nursing.

The National Hospital Day Committee under whose direction the program for the day is being developed includes the following: Dr. Lewis A. Sexton, E. S. Gilmore, Asa S. Bacon, P. W. Behrens, Pliny O. Clark, Surgeon General Hugh S. Cumming, Dr. Malcolm T. MacEachern, Rev. P. J. Mahan, Norman R. Martin, Dr. W. P. Morrill, Dr. Harry J. Moss, Dr. C. W. Munger, Dr. Geo. O'Hanlon, Dr. J. E. Sampson, Mary C. Wheeler, R.N.

The National Hospital Day Committee has prepared a leaflet detailing the most successful ideas for programs and publicity which were carried out last year, and copies of this material will be sent free to all hospitals which will request it of the Executive Secretary, National Hospital Day Committee, 537 S. Dearborn St., Chicago.

The MODERN HOSPITAL

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A HOSPITAL ASSOCIATION WITHOUT A LEGITIMATE FIELD

EVEN a cursory examination of any list of hospitals will reveal the exceedingly important role which hospitals organized and controlled by ecclesiastical denominations are playing in the United States and Canada. The Methodist Episcopal Church, to cite but a single example, has seventy-two hospitals under its jurisdiction. That these institutions should, in the interests of their patients, be conducted efficiently, that the character of their services should steadily improve, and that their efficient management not infrequently involves the solution of definite ecclesiastical problems, goes without saying. For assistance in the solution of these problems—sometimes financial, sometimes ethical—the individual hospitals may rightly look to their national church bodies for help. For purposes of practical administration it seems highly desirable for each denomination to organize a separate bureau or association through which it may bring the influence and resources of that denomination directly to bear upon its hospital problems. Such an organization the Methodist Episcopal Church has in fact in the Methodist Hospitals and Homes Association. The chief objectives of this organization are to serve as an open forum for the discussion of all matters pertaining to the Methodist Episcopal hospitals and homes; to secure the betterment of its hospitals and homes and thereby provide efficient service for all who come into them; to collate the best methods for handling hospital and home problems; and to work out detailed plans for accomplishing these results.

We understand, moreover, that the General Assembly of the Presbyterian Church has appointed a committee to consider the establishment of a hospital bureau. Other church bodies may have similar plans in mind.

The organization of these denominational hospital associations and bureaus is a step in the right direction. But while we recognize the high ideals of service which animate Mr. Pliny O. Clark, the president of the Protestant Hospital Association, and other officers of this organization, we entertain grave doubts as to whether it can be said that the organization of the Protestant Hospital Association is a step in the right direction. For it is difficult to conceive of the Protestant Hospital Association attaining any object which cannot be accomplished just as expeditiously and effectively, if not more so, by the American Hospital Association. Aside from the activities of denominational hospital bureaus there are few, if indeed there are any, activities which the Protestant Hospital Association may conceivably carry on that are not within the scope of the American Hospital Association. At this early stage of its existence, the Protestant Hospital Association is unnecessarily duplicating some of the legitimate activities of the American Hospital Association. This was strikingly evident at the West Baden meeting last year, when the Protestant Hospital Association, instead of confining itself strictly to ecclesiastical aspects of the hospital field, discussed at great length many general problems later considered in the various round tables of the American Hospital Association. Indeed the meetings of the Protestant Hospital Association, to a critical yet sympathetic observer, clearly demonstrated how closely the interests of the two associations coalesce and how difficult it is for the Protestant Hospital Association to find a legitimate field of its own.

Since many of the denominational hospitals are already members of the American Hospital Association, and all who are eligible should be members, would it not be far wiser, instead of maintaining a separate organization to inaugurate within the American Hospital Association a section on church affiliations, the function of which would be to deal with such aspects of the hospital field as are distinctly ecclesiastical in character?

This would serve to build up, rather than to detract from, the American Hospital Association, and at the same time would offer denominational

hospitals an adequate piece of machinery for transacting the business to which their church affiliations give rise.

NATIONAL HOSPITAL WEEK

AT THE annual meeting of the American Conference on Hospital Service at Chicago on March 9, a beginning was made toward inaugurating what will be known as National Hospital Week. During this week—the week in which Florence Nightingale's birthday falls—a well planned, nation-wide effort will be made to draw the attention of the public to our hospitals, their place in the community, the services they render and their financial and other needs. What this may mean in the long run for the hospitals of this country and Canada, time alone will tell; that it has great potentialities must be evident to anyone who gives the matter even superficial consideration. Indeed, we have very tangible evidence of these possibilities in the widespread, almost spontaneous, interest the national hospital day committee was able to arouse in our hospitals through the observance of National Hospital Day. For this initial step no small amount of credit is due the hospital day committee. Taking into consideration, however, the varied aspects of the hospital field calling for attention and emphasis, and the large number of national organizations that are seeking to promote the best interests of the field, it seems desirable not only to enlarge the scope of this annual observance from a day to a week, but also to have it sponsored by the fifteen great national organizations that comprise the American Conference on Hospital Service.

The observance of Hospital Week will give our hospitals, particularly the smaller institutions, a better opportunity than they have ever had to acquaint the rank and file with their purpose and work and to overcome whatever prejudices may still remain. The past decade has witnessed a great change of attitude toward hospitals; they are no longer regarded with dread and abhorrence. The attitude of not a few, however, still needs to be changed. The activities of Hospital Week, if rightly directed, may do much to bring this about. Many persons, moreover, still need to be informed as to the exact role the hospital is meant to play in the community and as to the facilities and services it has to offer in playing that role. What better opportunity could there be than a week given over to newspaper publicity, meetings, demonstrations, graduating exercises and other activities, to carry the message of the hospital to its community.

Some of the ways in which this may be done were touched upon briefly by Dr. Billings in placing the suggestion before the Conference in his opening address (See page 382). It will rest with the National Hospital Week committee which Dr. Billings was authorized to appoint, to work out these plans in detail and to devise other ways and means for realizing the aims of the movement.

TRUSTEES LIABLE FOR NEGLIGENCE OF INCOMPETENT PERSONNEL

"WE ARE convinced that sound reasons sustain the great weight of authority to the effect that a public charity should not be held liable for the negligence of the servant in whose selection the hospital and its managers have exercised due care. On the other hand such an institution is liable when it fails to exercise such care."

In these words the Supreme Court of Ohio upheld a verdict against a public charitable hospital for damages caused by an incompetent nurse. The decision is not a new one in American courts but it is one of the most unequivocal declarations yet made limiting the exemption from liability of charitable hospitals. The courts of New York, Texas, Washington, Rhode Island, Kentucky, Maine, and New Hampshire had held similarly that "the general principle protecting charitable institutions from actions for negligence does not include negligence that results in the service of incompetent, unskilled, or careless servants."

On the other hand the courts of Massachusetts, Missouri, Pennsylvania, Tennessee, South Carolina, Michigan, and Illinois, have upheld the view that charitable institutions are exempt from liability for negligence. The Massachusetts Supreme Court went so far as to say that "a public charitable hospital is not liable for negligence of its managers in selecting incompetent subordinate agents, any more than it is for the negligence of subordinates selected with care." The conclusion of most of the courts favoring the view is stated thus: "When a public corporation has no property or funds but what have been contributed for a special charitable purpose, it would be against all law and all equity to apply the trust funds thus contributed to compensate injuries inflicted by the negligence of its agents and servants."

Sweeping aside the above doctrine and also the doctrine that patients who accept the care of the hospital waive the right to damages for negligence, the court declares, "It (the hospital) cannot watch or control the countless acts and movements of its servants, but it can and should exercise care to see that only careful and competent servants minister to stricken patients who are within its walls."

"Moreover, while it may well be said that donors of funds for the praiseworthy objects of charitable hospitals do not contemplate the diversion of the funds for the payment of damages for the numerous acts of servants referred to, yet they necessarily realize and appreciate that they give their donations to those who have the management and control of the institution, and that every principle of justice requires that they use care in the development and maintenance of the property and in the selection of servants who have the oversight of patients." The court further quotes approvingly from a North Carolina case where it is said: "The beneficiaries of charitable institutions are the poor who have very little opportunity for selection and it is the purpose of the founders to give to them skillful and humane treatment. If they are permitted to employ those who are incompetent and unskilled, funds bestowed for benefits are diverted from their true purpose and under the form of a charity they become a menace to those for whose benefit they are established."

The decision in Ohio may be overruled as to the particular case upon rehearing; the legislature may specifically exempt charitable institutions from all liability which again is an extremely doubtful possibility; the courts of other states may follow the view of non-liability held in Massachusetts, instead of the view in this case. But in the meantime the decision gives ground for speculation as to its effect.

The decision obviously has a direct and practical importance for hospital administrators. *The decision fixes responsibility upon the governing board of charitable hospitals to exercise due care in the selection of their superintendents, physicians, surgeons, nurses and servants who deal with the sick. It is a responsibility which cannot be delegated with safety. It disposes of the question of selection or control of assistants by anyone but the trustees; they alone are responsible for the safeguarding of their trusteeship. The superintendent assumes an added importance by virtue of his position as executive officer for the board of trustees.*

With the liability for negligence of incompetent assistants menacing them, will not the trustees be compelled to exercise control over the selection of the medical and surgical staff, as well as the staffs of all other departments? How will it affect the open staff, or a staff selected by the physicians of the hospital?

Though responsibility is fixed upon the governing board, there are certain advantages which accrue to the board. If it has the responsibility can it be limited in its rights? Can the law compel a hospital to open its staff to any person or form of medical practice without the consent of the governing board? Would it not be against all equity to compel a board to select anyone for a duty when the board is responsible for the safeguarding of its trust against negligence or incompetence? What, therefore, becomes of the proposed legislation compelling open staffs in all hospitals? Would it not be void because of a direct interference with the rights of the governing board in safeguarding the trust for which it is responsible?

THE OCTOCENTENARY OF A GREAT HOSPITAL

THERE is a certain element of romance about the projected octocentenary of St. Bartholemew's Hospital, London. The England of Henry I, just returning to normalcy after the Conquest; the vision and vow of the Royal Minstrel, Rahere; the foundation of the Augustinian Canons and the beginnings of St. Bartholemew's Fair, these appeal to the imagination. Four centuries of existence as a religious-medical house and four centuries of life as a strictly medical institution and all the traditions and charm of these 800 years carry with them a lure for us of the new world. Perhaps no institution in English-speaking countries has exercised so great an influence on medical thought as has Bart's, certainly since the granting of its charter by Henry VIII, its force has been unmistakable.

The committee, of which Lord Stanmere is the chairman, plans to hold a celebration in the spring of 1923 to bring the history and usefulness of this venerable institution before the public and without doubt very considerable additions will thus be made to the history of medicine. The American Hospital Association should participate therein since it will be the means of bringing to it an immeasurably profitable inspiration. Also it will cement more strongly our medical ties with the mother nation to whose ideals we owe such a great debt.

In the labor of creating and upbuilding of our modern hospitals, we of America are apt to forget the value of historical documents and the influence they will have upon posterity. Some of our institutions will one of these days be holding octocentenaries and if we build our archives against that day, our medical descendents will rise up and call us truly blessed.

Establish Medical Clinic.—The provincial executive council of Alberta has established a medical clinic at the Stratchoma Hospital in Edmonton, the work being supervised by the medical faculty of the University of Alberta and the government department of health. Indigent cases will be treated at the clinic and it will be available for general consultative work throughout the province. The Stratchoma Hospital is leased by military authorities.

MINNEAPOLIS HOSPITAL ENTERS THE MOVIES

By WALTER E. LIST, M.D., Superintendent, Minneapolis General Hospital, Minneapolis, Minn.

MOVING pictures can be used to excellent advantage in educating the public as to hospital procedure in rendering medical and nursing service. Pictures of the Minneapolis General Hospital will be shown in many of the theaters of this city and at the various club meetings, the idea being to popularize the hospital and to allay the fear, suspicion and prejudice that may exist due to lack of knowledge of hospital technique.

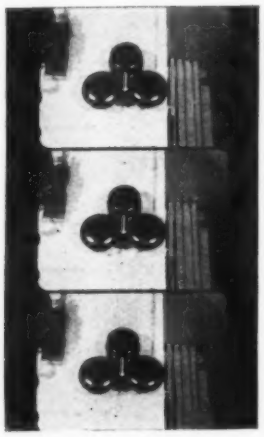
Various methods must be used in selling the hospital to the community, and the superintendent must exercise every precaution to avoid discharging dissatisfied patients.

Favorable newspaper publicity, public talks and moving pictures are extremely valuable but with these means alone one can not succeed, because in the final analysis it is the service to the patient that really builds the foundation of accomplishment.

Considerable difficulty will be encountered in the approach of the various movie theater owners, in that they regard a hospital picture as advertising. With this in mind, an interesting story must be conceived in order to make it educational and in this way attract the attention of theater managers.

The following is a resume of the pictures of the Minneapolis General Hospital:

A STORY OF SERVICE BY THE MINNEAPOLIS GENERAL HOSPITAL



Scene 1

GENERAL HOSPITAL GARAGE

(Close up. Fade in.)

Wall telephone ringing violently.

Scene 2

GENERAL HOSPITAL GARAGE

(Semi-Close up.)

Ambulance driver answers phone.

Scene 3

GENERAL HOSPITAL GARAGE

Ambulance driven out of garage, slows down to take on doctor who comes into scene. Ambulance speeds off.

Scene 4

CITY STREET

Man sits on curb holding Child who has been struck by automobile on his lap, crowd stands around. Ambulance drives up. Doctor gives Child a hurried examination and he and ambulance driver lift her on stretchers and put her into ambulance. Father also enters ambulance. Ambulance drives off. Fade out.

Scene 5

RECEIVING WARD—EXAMINATION ROOM

(Fade in.)

Everything in readiness for an emergency.

Head nurse, pupil nurse and doctor in room. Child is brought in on stretcher, doctor and nurses busy themselves with patient.

Scene 6

X-RAY ROOM

The x-ray and laboratory verify the doctor's diagnosis. There is no guess work.

Child on table having x-ray taken. Doctor and x-ray nurse in charge.

Scene 7

LABORATORY

(Long Shot)

General view of room, showing workers performing various tests.

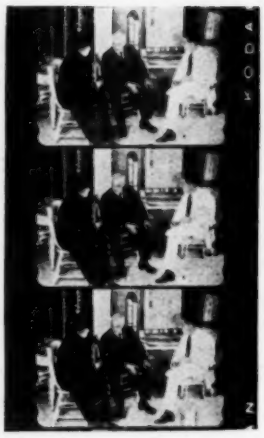
Scene 11

LIVING ROOM NURSE'S HOME

(Long Shot)

Although the days are busy ones for the nurses, there is still time for play.

Group of nurses around piano singing, others reading and chatting.



Scene 8

HALLWAY—STATION A

An important consultation.

Doctor at desk talking to parents of Child, who are seated. Doctors answers parent's questions carefully and talks to them in a kindly way.

Scene 12

CORNER OF MEN'S WARD

Hospital days now pass quickly.

Occupational worker, showing bed patient how to make baskets; man in wheel chair is making scarf. Other bed patient is putting finishing touches on a lamp.

Scene 9

OPERATING ROOM

Parents consent to necessary operation, which is performed by a specialist.

Child is brought in, placed on table and preparations are made for leg operation by nurses and doctors. Fade Out. Iris Out.

Scene 13

CORNER OF CHILDREN'S WARD

Children in their chairs form a semi-circle; accident child in foreground. Some children are drawing, others doing cut-out work. Volunteer directing them. She asks children if they would like a story, they are delighted, stop work and listen intently to reading of story. Iris Out.

Scene 10

CHILDREN'S WARD.

(Iris In)

Convalescing.

Three nurses busy with children, one taking Child's temperature, another nurse giving medicine, a third giving a patient water.

Scene 14

HOSPITAL AUDITORIUM

Charlie Chaplin and Mary Pickford are among the Wednesday night entertainers.

Patients gathering for motion picture entertainments; some in wheel chairs, some on trucks, others being helped by doctors and nurses. Show auditorium filled. Fade In.

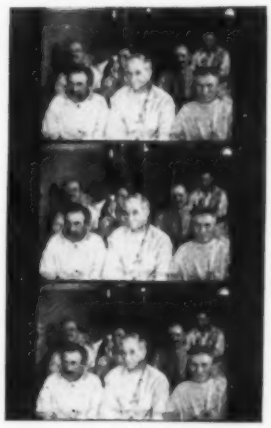
Scene 15

HOSPITAL AUDITORIUM

(Semi-Close Up)

Motion pictures screen presenting Mary Pickford in "Hoodlum."

Five or six old men grinning and showing that they are enjoying the film immensely. Fade Out.



Scene 16

HOSPITAL INFORMATION DESK

Visiting time, a popular hour.

Many visitors standing around desk, clerk gives passes to Child's parents and then to others.

Scene 17

CHILDREN'S WARD

(Semi-Close Up)

Child sitting in wheel chair, parents come into picture, delighted to see that she is up. Doctor comes into picture. Parents thank him for what he had done. He points to child's teeth showing they need attention. They indicate anything he wishes to do is right with them.

Scene 18

DENTISTRY

The teeth a vital part of every examination.

Child in dental chair, dentist working on teeth, dental nurse in attendance. Fade Out.

Scene 19

CHILDREN'S WARD

(Semi-Close Up)

A leg as good as new.

Child being dressed for street by nurse, she shows parents that she can walk as well as ever. Parents express gratitude to doctor and nurse. Go off with Child.

Scene 20

A CITY STREET

The work of the hospital is not done however for the social service department follows the child into the home to see that the doctor's instructions are followed and that recovery is complete.

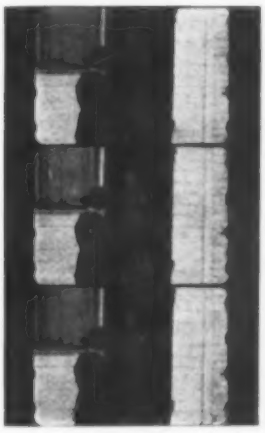
Social worker approaches cottage.

Scene 21

COTTAGE DOOR

(Semi-Close Up)

Social worker knocks on door. Mother of Child opens door and welcomes worker.

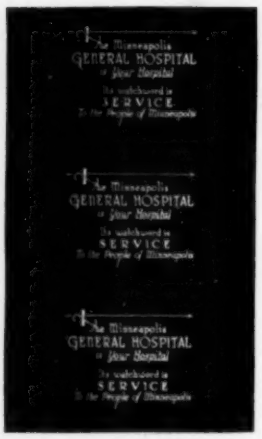


Scene 22

COTTAGE LIVING ROOM

Simple home of working people.

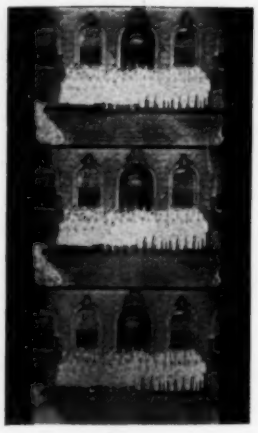
Child runs up to worker, mother invites her to sit down, worker asks in friendly way about Child. Fade Out.



MINNEAPOLIS GENERAL HOSPITAL

(Iris In)

The Minneapolis General Hospital is your hospital. Its watchword is *service* to the people of Minneapolis.



Scene 23

Nurses and doctors grouped at hospital entrance. Iris Out.

INDIANA PROGRAM ANNOUNCED

The Indiana Section of the American Hospital Association will hold its annual meeting at the Claypool Hotel in Indianapolis on April 19. The following tentative program has been arranged:

Invocation, Rev. Lewis Brown.
President's report, Dr. George F. Keiper.
Treasurer's report, Mrs. Ethel P. Clarke, R.N.
Secretary's report, Miss Anna Medendorp, R.N.
Reports of committees.
Other business.

"Methods of Serving Food to Patient," Miss Mary J. Davis, City Hospital, Indianapolis.

"The Relation of the Hospital to Anesthetics," Dr. Charles Combs, Terre Haute.

"Phase of Standardization as Dealing with the Complete Record of the Patient," Dr. Arnette, Lafayette.

"Follow-up Work of the Social Service Department," Robert E. Neff, Long Hospital, Indianapolis.

"Value of Recruiting Campaign," Miss Mary Gladwin, R.N.

"Some Phase of the Nursing Problem," Mrs. Ethel P. Clarke, Long Hospital, Indianapolis.

"Financing Schools of Nursing," Miss Goodrich, Teachers' College, Columbia University, New York.

"Laboratory Work in Small Hospitals," Dr. J. H. Warvel, Methodist Hospital, Indianapolis.

INFORMATION ON NEW YORK HOSPITALS

Last month saw the establishment in New York of the Hospital Information Bureau in the New York Academy of Medicine Annex Building, 17 West Forty-third Street. Dr. E. H. Lewinski-Corwin, executive secretary of the Public Health Committee of the Academy of Medicine, has been appointed director.

The purpose of the bureau is to keep in touch with hospital work and progress in New York City, to furnish information to all interested in administration, record keeping and other facts of hospital work, organization and facilities; to study and make known the hospital needs of the city, to prepare exhibits, to maintain a library of hospital reports and to promote uniformity in hospital reporting.

REPORTS CASE OF MALINGERER

Miss Margaret White, alias Mrs. Ryan, of Denver, Des Moines, Sioux City, Minneapolis and other cities was a docile patient at Rockford Hospital, Rockford, Ill., until recently when her daily rations of morphine were reduced from two grains to one-half grain. She then sought discharge but was detained by Superintendent S. G. Davidson until federal authorities in Chicago failed to report interest in her case. Superintendent Davidson and his staff believe her to be a malingerer who obtains hospitalization for the purpose of obtaining morphine.

INCOME TAX RETURNS OF EMPLOYES

The Internal Revenue Bureau of the Treasury Department in its June, 1921, bulletin issued the following ruling in relation to income tax returns of hospital employes:

"When the employes of a hospital are subject to immediate service on demand at any time during the twenty-four hours of the day and on that account are required to accept quarters and meals at the hospital, the value of such quarters and meals may be considered as being furnished for the convenience of the hospital and does not represent additional compensation to the employes.

"On the other hand, where the employes are on duty a certain number of hours each day and could, if they so desired, obtain meals and lodging elsewhere than in the hospital—and yet perform the duties required of them by the hospital—the ratable value of the board and lodging furnished is considered additional compensation. (20-21-1634: O.D. 915, June, 1921, Cumulative Bulletin, Page 85)."

LETTER WRITING IN HOSPITAL PUBLICITY

Mr. Ralph Welles Keeler, director of publicity committee of the Methodist Hospitals and Homes, in speaking on "Hospital Publicity," said in regard to letter writing as a channel of publicity: "The letter-writer propagandist of today must be more than a mechanic. He must be able to write real letters. His form letters to district superintendents and pastors cannot be composed with careless abandon. He must have something to say and be able to say it well. His letters to laymen must breathe personality. There must be a different appeal to men and women. His letter to young people must show that he appreciates the difference in viewpoint and outlook between youth and old age. Letters about the sick must be thoughtful and sympathetic. In other words, propaganda letters, must be personal—decidedly, humanly personal.

"It seems hardly necessary to say that mailing lists should be kept right up to the minute. A patron of a hospital or home likes to think that your interest lasts long enough to see that his initials, the spelling of his name, and his street address are correct.

"In the answering of letters there should be great care. For here are unexpected channels of publicity. Both the letter of thanks and the response to criticism should be of the most intimate, careful nature."

ETHER STUDIES*

By ALLAN WINTER ROWE, S.M., Ph.D., Chemist, Massachusetts Homeopathic Hospital, Boston

In the first of two articles on anesthetic ethers, Mr. Rowe, chemist at Massachusetts Homeopathic Hospital, Boston, discusses certain tests used by him as a basis of a routine procedure for the determination of the suitability of ethers for anesthesia.

The specific gravity, aldehyde and peroxide tests, herewith described, themselves furnish enough information to warrant the rejection of ethers to be used for anesthesia, according to the author. The probability of contamination of the ethers by metal containers is suggested by him.

Current practice at the Massachusetts Homeopathic Hospital is to buy ether in lots of 100 pounds or more, and on receipt of the shipment to send one or two pounds to the laboratory for examination. If the report is unfavorable the ether is returned to the manufacturer.

SOME eighteen months or more ago as the result of repeated complaints by anesthetists concerning the character of anesthetic ethers, the quality of anesthesia produced by them, and the after effects of an undesirable character noted in a number of cases, the writer undertook a study of the ethers vended by the group of firms generally recognized as handling a standard product for the purpose of ascertaining if there were any demonstrable ground for such complaints.

That anesthetic ethers might contain impurities of a deleterious character has been freely recognized and commented on at length in scientific literature. In 1911 Baskerville and Hamor (*Journal of Industrial and Engineering Chemistry*, Vol. 3, Nos. 5 and 6, 1911) as a part of an elaborate study on anesthetics subjected the various chemical and physical tests applied to ethers to thorough critical examination, demonstrated the validity of certain tests and established certain standards of purity. A review of this and other works showed that the performance of a group of relatively simple tests would demonstrate with minimum possibility of error the suitability of an ether for anesthetic purposes.

The application of these tests to the ether at that time in use in the hospital showed it was entirely unfit for the purposes for which it was sold. Recognizing the certainty that ether would undergo definite deterioration on standing and that an ether entirely suitable for anesthesia at the time of leaving the factory might through the changes incident to storage become entirely unfit for this purpose by the time it reached the operating room, the subjection of samples from all lots of ether purchased was made a routine procedure. The study has led necessarily to the consideration of many other factors involved in the general problem of pure anesthetic ether, and several investigations are now under way. The experience in this laboratory, however, has been of such a character as to warrant this preliminary communication for the information of hospitals and others making use of anesthetic ether and of defining for them certain standards to which ethers should conform. No essentially new material is presented but the necessity of routine examination for purity of anesthetic ethers is demonstrated. The tests and methods employed will be taken up in the next section.

1. *Specific Gravity.* The specific gravity of an absolutely pure anhydrous ether is usually given as 0.7178 when taken at 15 degrees in comparison with water at 4 degrees or, as it is usually written, 15°/4°. As has been pointed out, however, by many writers, water-free ether is extremely hygroscopic and immediately on exposure to air absorbs enough water to increase the specific gravity to from 0.720 to 0.721. When the latter figure is reached, the further increase in specific gravity is a relatively slow one. As such small quantities of water will produce so definite an influence on the specific gravity and, further, as alcohol, a usual contaminant, also tends to raise the density, the determination of this physical constant is an important test, giving evidence of the relative purity of the material.

Exact densimetric determinations are difficult to make. Sources of error are numerous, and the operation bespeaks a time consumption disproportionate to the accuracy usually obtained. This is particularly true in dealing with so volatile a liquid as ether. Experiments were made with the Westphal balance to ascertain if this rapid procedure could be utilized in this connection. The technic as developed is as follows: The ether at a temperature as near 25°† centigrade as possible is placed in a silvered Dewar flask of cylindrical shape and the specific gravity rapidly determined by an accurately calibrated and standardized Westphal balance. As the variation of the observed specific gravities is within very narrow limits, it is possible to assemble the balance, placing the heavy weights in position, and securing final equilibrium by the movement of only one of the riders. The temperature before and after the determination is taken by a thermometer placed in the liquid during the measurement, there being no appreciable change within the limited time consumed by the measurement.

Pycnometer Used to Check Results

During the earlier work each Westphal balance determination was checked by means of the pycnometer, and the concordance invariably observed warrants amply the confidence placed in these measurements. As it is difficult to secure a reading at exactly 25°, the temperature coefficient was determined both by the Westphal balance and with the pycnometer. It is to be noted that the Westphal balance gives comparisons between the liquid under investigation and water at the same temperature. In other words, the Westphal balance is usually constructed to give accurate readings of specific gravity at 15° as compared with water at 15°. By means of the pycnometer, density determinations were made on ether at 15° and 25°, compared with water at the same temperature. These showed a difference in the density for this 10° range of .008 or .0008 for each degree below 25°, assuming uniform rate of change. The change in volume of the Westphal balance plummet would not be identical with that of a similar amount of water, but the change in the density of water over this particular range is only

*This is the first of two papers written for The Modern Hospital by Mr. Rowe.

†This temperature more nearly approximates that of the usual laboratory than the 15° standard, and the advantage of dealing with a thermally homogenous ether more than compensates for the increased volatility.

.002, which would be the magnitude of the error introduced in the determination of this temperature coefficient should the plummet show no change of volume over the 10° interval. As, however, the plummet does experience some expansion, this operates to lessen the difference and reduce the figure somewhat. Furthermore, as the maximum variation from the 25°/25° standard adopted was never more than 2°, the maximum value of the error of the temperature correction would be of the order of .0004, which falls well within the accepted error of observation.

As this method is so easy of application, practical in operation and requires no great measure of technical skill, it is felt that it offers a most satisfactory procedure for the determination of this quantity for the purposes under discussion. As the specific gravities usually given are determined at 15°/4°, the values at 25°/25° must be calculated for purposes of comparison. Ether having a specific gravity of 0.718 at 15°/4° gives the value of 0.711 when determined at 25°/25°. The value of 0.721, the usually accepted upper limit, similarly becomes 0.714.

Distillation Test Better than Boiling Point

2. *Boiling Point and Distillation Test.* The boiling point of pure anhydrous ether under standard conditions is usually given at 34.6°. The determination of this quantity, however, is not as valuable as at first sight it might seem to be, as the two chief sources of contamination, namely, water and alcohol, operate respectively in opposite sense to each other on the boiling point of the mixture. In other words, water lowers and alcohol raises the boiling point, and an ether might contain appreciable amounts of both contaminants and show a normal boiling point while small amounts of one or the other might produce a notable change. The fractional distillation of the ether, on the other hand, gives more information regarding the purity. Baskerville and Hamor state that at least 97 per cent by volume should distill between 34° and 36°. In their fractionations, quantities equivalent to about 1 per cent distilled over below 34°, the great bulk of the ether, as already stated, between 34° and 36° and only small residual amounts of the order of 1 or 2 per cent over above the latter temperature. They state that in any case the entire sample should distill below 37°.

To carry out this fractionation with any degree of accuracy requires a properly designed still head and distillation apparatus, a highly accurate thermometer, a good barometer to indicate fluctuations of the atmospheric pressure and the exercise of a considerable degree of care to avoid super-heating of the vapor and consequent misleading results. Baskerville and Hamor in their frequently cited article define the conditions for the performance of the test, but even when the precautions are observed, in the hands of any but a skilled worker the test is far from accurate.

While the boiling point and distillation tests have been applied as part of the routine procedure, great weight has not been laid upon the indications of the test. The inclusion of a certain amount of alcohol in anesthetic ether is to be regarded as a not undesirable practice, certainly if the ether is to be used by the drop method. Again, many anesthetists follow a technic in which the ether vapor is partially saturated with moisture prior to administration so that the inclusion of small amounts of water per se is not to be regarded as primarily deleterious. The economic aspect is of course a factor, and the inclusion of gross amounts of water would render the ether undesirable from this standpoint.

The experience in this laboratory, however, offers no basis for an assumption that in any high grade anesthetic ether such gross contamination is ever found. Finally, the hygroscopicity of an anhydrous ether, already referred to, leads to contamination of material in the act of transference, and while this is not serious, it negatives the necessity of an exact distillation test. For purposes of rough comparison, a long necked distilling flask coupled with a twenty-four inch Liebig condenser has been used in this laboratory, and the indications of the test regarded as interesting rather than definitive. In the writer's opinion, this test could be omitted without serious prejudice to the accuracy of the conclusions drawn from the routine examination.

Presence of Aldehyde Excludes Ether

3. *Aldehyde.* It has been shown by numerous writers that dry oxygen in molecular combination exercises a chemical influence upon pure high grade ether with the formation of a progressive series of oxidation products. In the first place, there is the possibility of the direct formation of hydrogen peroxide by the union of atmospheric oxygen with water. The peroxide then could act upon alcohol to form acet-aldehyde, the peroxide of the same, acetic peroxide, and ultimately acetic acid. The ether itself is susceptible of peroxide formation under the influence both of oxygen and of hydrogen peroxide, while the acetic acid could pass over the peracetic acid. The decomposition of the former would liberate free oxygen; of the latter would regenerate the hydrogen peroxide. A continuous and vicious cycle is hereby set up with the formation of aldehydes and of acids with intermediate peroxide formations.‡

It is well recognized that aldehydes exercise an irritating effect on the respiratory passages and that their inclusion in ether for anesthesia is entirely undesirable. The test for aldehyde then is to be regarded as one of exclusion and a positive response an index of unfitness of the sample for anesthetic purposes. A large number of tests have been suggested for the determination of aldehyde. In the papers by Baskerville and Hamor, already cited, a careful analysis and comparison of these tests have been made. The potassium hydroxide test specified by the majority of pharmacopoeias in one or another form seems on the whole to be the most satisfactory for a routine determination. The technic recommended by Baskerville was followed:

"On covering five grams of solid potassium hydroxide in freshly broken pieces about 5 millimeters in diameter with 30 cc. of ether and allowing the mixture to stand for six hours tightly closed and protected from light and with occasional shaking, the potassium hydroxide should not acquire a yellowish or brown color, no colored substance should separate, and the ether should not become turbid nor assume any color." The test in this form was applied as a matter of routine. It may be said in passing that in very few of the ethers examined has aldehyde contamination been a factor. The theoretical implications will be discussed in a later part of the paper.

Peroxide is Also Deleterious

4. *Peroxide.* As was stated in the preceding section, contamination from peroxide will arise when pure ether, or more especially ether containing a trace of moisture, remains in contact with atmospheric oxygen. Peroxide contamination is both directly and indirectly deleterious, it possessing in itself a definite irritant action on the respiratory passages and its presence conditioning and

‡A brief and lucid discussion of these points is given in the paper by Baskerville and Hamor.

expediting the formation of highly undesirable oxidation products. One of the characteristic reactions of all peroxides is the liberation of iodine from the inorganic iodides. Potassium iodide is decomposed with the liberation of iodine but as solutions of this compound are not entirely stable and as atmospheric oxygen held in solution will also in time produce decomposition, the compound potassium iodide—cadmium iodide—in 10 per cent solution as recommended by Baskerville and Hamor was adopted as the standard reagent. Ten cc. of ether and 2 cc. of the reagent were used for the test. A few drops of starch solution sensitizes the test materially, but should only be added after a suspected yellow color has developed a ° means of confirmation. The cadmium potassium iodide is unaffected by the factors of disturbance which invalidate potassium iodide alone. As the liberation of iodine is slow in the presence of small amounts of peroxide, the test is regarded as negative only when no iodide is liberated at the end of one hour.

5. *Acidity.* Among the final stadia of the progressive oxidation changes, acid formation has already been noted. The gross contamination by the sulphuric acid used in the process of manufacture is hardly conceivable, but the formation of acid oxidation products of alcohol is possible in an ether which has been stored for a long period of time. Again, however, it would be hardly possible for the acid from this source to be present and not find very appreciable quantities of the intermediate aldehyde and peroxide compounds. The acidity test has been included in the routine more as a matter of completeness than as a final criterion for exclusion. During the first determinations titrations of the acidity were made with N/100 potassium hydroxide and phenol phthalein as an indicator, following the modified Vulpius technique, the results being expressed in terms of acetic acid. As the results thus obtained showed in no instance more than a minimal trace of acid, the simpler and for this purpose equally satisfactory method was adopted of allowing 25 cc. of the sample to evaporate at room temperature and after the addition of 5 cc. of distilled water to the residue, testing the resulting solution with pale blue litmus paper.

Odor Test is Quick and Rough

6. *Odor.* Another quick and rough test which none the less is highly informative .s made by allowing 50 cc. of the sample to evaporate on a piece of filter paper contained in a flat glass dish (a Petri dish cover is satisfactory for this purpose) and noting any odor which the filter paper may have after the evaporation. The higher alcohols and their products, the so-called "heavy oil of wine," indicate their presence at this point with considerable sensitiveness. This test was added to the general routine procedure, any odor being regarded as an exclusion test.

The following analysis is taken at random to illustrate the laboratory report:

REPORT ON ETHER (Anesthetic).
October 8, 1921.

No. XX.
Firm F

Analysis

Specific Gravity—0.715 @ 23°
0.713 @ 25°
Distillation Test—34° — 36° 90%
37° 10%
Aldehyde Test— Slight amount of white separate. Ether turbid.
Peroxide Test— Positive at once.
Acidity— Negative.
Odor— Negative.

Opinion

The sample is unfit for anesthetic purposes, due, in the first instance, to peroxide content.

Chemist.

The results of these routine examinations can best be considered if placed in tabular form. In the following table the manufacturing firms are designated by letter. All specific gravities are given corrected to 25°/25°.

No.	Date.	Firm.	Sp. Gr.	B. P. Dist.	Aldehyde.	Peroxide.	Acid.	Odor.	Disposition.
1.	5/5/20	A	0.712	34.8/36° 98%	O	O	O	O	Accepted
2.	12/5/20	A	.712	34.4/36° 90%	O	+ at once	O	O	Rejected
3.	19/5/20	A	.712	34/36° 96%	O	+ (30 min.)	O	O	Rejected
4.	9/7/20	B	.715	34.4/36° 80%	+	+ at once	O	O	Rejected
5.	3/8/20	B	.715	34/36° 70%	Turbid	+ (4 min.)	O	O	Rejected
6.	13/8/20	A	.711	34/36° 90%	O	O	O	O	Accepted
7.	13/8/20	C	.713	34/36° 80%	O	O	O	O	Accepted
8.	19/8/20	A	.714	34/36° 50%	O	O	O	O	Accepted
9.	27/8/20	D	.715	34.34/36° 50%	Turbid separate	O	O	O	Rejected
10.	30/8/20	E	.713	35.3/36° 50%	Turbid	O	O	O	Rejected
11.	11/10/20	C	.715	34.4/36° 65%	Turbid separate	O	O	O	Rejected
12.	1/3/21	C	.714	34.5/36° 50%	O	O	O	O	Accepted
13.	1/8/21	C	.714	34/36° 50%	O	O	O	O	Accepted
14.	2/8/21	C	.713	34/36° 60%	O	O	O	O	Accepted
15.	19/9/21	C	.713	34.8/36° 50%	Turbid separate	+ at once	O	O	Rejected
16.	26/9/21	A	.713	34.2/36° 60%	O	O	O	O	Accepted
17.	7/10/21	C	.713	34/36° 90%	O	O	O	O	Accepted
18.	8/10/21	F	.713	34/36° 90%	Turbid separate	+ at once	O	O	Rejected
19.	11/10/21	C	.714	33/36° 98%	O	O	O	O	Accepted
20.	19/10/21	F	.712	34/36° 60%	Turbid	+ at once	O	+	Rejected
21.	1/11/21	C	.712	32.5/36° 98%	O	++ at once	O	O	Rejected
22.	1/11/21	C	.714	34.2/36° 90%	O	+ at once	O	O	Rejected
23.	3/11/21	C	.714	32.5/36° 85%	O	O	O	O	Accepted
24.	3/11/21	C	.714	34.2/36° 97%	O	O	O	O	Accepted
25.	5/11/21	G	.711	33.6/36° 95%	O	O	O	O	Accepted

The above series of tests by the procedures as outlined are now applied as a matter of routine to all lots of ether purchased for anesthetic purposes. The current hospital practice is to buy anesthetic ether in lots of 100 pounds or more. On receipt of the shipment, one or two pounds are taken from the shipment and sent to the laboratory for examination. The report on the analysis goes to the superintendent and to the pharmacy. If favorable, the ether is issued for the designated purposes; if unfavorable, it is returned to the manufacturer with a statement of the reasons for rejection.

First, twelve out of twenty-five samples, practically 50 per cent, were rejected and nine of these showed marked peroxide content.

An analysis of the above results is not without interest. It will be noted that the four samples, Nos. 4, 5, 9 and 11, with a specific gravity of .715, were all rejected, they showing other sources of contamination. The two ethers showing the lowest specific gravity, Nos. 6 and 25, conform satisfactorily to the accepted standards, as was stated in the earlier part of the discussion. The ethers with a specific gravity of .714, Nos. 8, 12, 13, 19, 22, 23 and 24, a value corresponding, as has already been stated,

to 0.721 at 15°/4°, were all accepted but one exception, namely, No. 22.

With the intermediate values, there seems to be no particular rule for acception or rejection which is indicated by the specific gravities. It may be said generally, however, that by the method adopted, specific gravities between .711 and .714 fall within allowable limits. Values above the latter number should excite suspicion of the purity of the product. Under the distillation test, it will be observed that a relatively large number of the samples fall materially under the criterion established by Baskerville and Hamor. Over 50 per cent of the ethers show less than 90 per cent distilling under 36°, and in many instances only 50 per cent of the sample had passed over at this high temperature. It is to be remembered, however, that no great degree of accuracy is claimed for these results. An attempt to correlate specific gravity with percentage distilled fails signally, for while the four samples of highest specific gravity are all under 90 per cent, of the remaining ten the actual percentages coming over bear no relationship to the specific gravities. While this test if carried out accurately would undoubtedly be more informative than is the case with the present rough method, it remains questionable, as has already been stated, if its inclusion is sufficiently valuable to warrant the time expended.

The aldehyde test leaves some room for discussion. In a few of the samples, Nos. 9, 11, 15 and 18, there was a definite separation of material as well as a marked turbidity of the ether. Several of the other ethers, Nos. 5, 10 and 20, showed a turbidity on standing but without the formation of a separate. Baskerville and Hamor have already noted the fact that peroxide alone may cause a turbidity, so that too much weight must not be given to this test unless there is discoloration of the ether or a separation of resinous bodies. They further note that contact with cork may lead to a yellow coloration on applying the test which is not a true index of aldehyde content. In but one instance, No. 25, was this condition met with, all other samples being drawn from original metal containers.

The peroxide test is perhaps the most satisfactory of the exclusion tests for routine laboratory procedure. Its ease of performance, lack of technical difficulties, sensitivity and accuracy render it a most satisfactory test. None of the samples examined showed acid in appreciable amounts, and in only one (No. 20) was the odor test positive. An inspection of the joint results of the aldehyde and peroxide tests discloses the following fact: In but two cases is the aldehyde positive and the peroxide negative (Nos. 9 and 11), while in a number of samples negative aldehyde tests are observed with markedly positive peroxide. This introduces a consideration of the probable mechanics of contamination.

It is fair to assume that with all of the firms manufacturing anesthetic ether, every effort is made to produce an article of high grade and conforming straitly to the criteria established by the pharmacopoeia, by purchasing boards and other standardizing agencies. The usual method of vending ether by sealing it in small metal containers brings about a condition promoting contamination after the ether is ready for market. The prime essential for the contamination produced by oxidative processes is the presence of oxygen. These containers, which are only partly filled, show a relatively large air space, and this is proportionately greater to the volume of ether, the smaller the unit in which the ether is sold. As the tendency in vending anesthetic ether is to use small units, owing to contamination after the can has been opened, this method of distribution imposes the conditions most conducive to consequent contamination.

A further factor, and one which the writer believes has not been generally recognized, is the catalytic action of the metal of the container. Contact action is undoubtedly a factor, and among the efficient catalyzers of reactions of these types, the metals play a most important rôle. Possible methods of obviation would be the use of a glass container, which involves certain difficulties in transportation and in the mechanical detail of handling, or the filling of the metal containers completely at the boiling point of ether, closing them by means of an electric soldering iron and low melting alloy and constructing the cans sufficiently strong so that there would be no tendency to collapse from the resultant partial vacuum which would exist when the ether had cooled down to room temperature.

An interesting confirmation of the catalytic action of the metal container is found in the analysis of sample No. 25.* This is a sample of Khalbaum's "Aether fuer Narkose" which bears the factory date of February 7, 1910. The ether is contained in small 100 cc. bottles of amber glass sealed with cork stoppers which, in turn, are covered with the standard Kahlbaum foil cap. The bottles are wrapped in an excellent grade of paper which, however, allows the passage of considerable light. Each bottle bears the warning "To protect from light." This sample, over eleven years old, shows a specific gravity of 0.711, the initial boiling point is 33.6°, which would bespeak a slight water contamination, 95 per cent of the total amount distilled over under 36° and the remaining tests were all negative. The potassium hydroxide test for aldehyde showed a slight yellow color but, as has already been stated, the contact of ether with cork gives rise to such a discoloration. The other aldehyde tests given by Baskerville and Hamor, notably the Nessler test, were all negative, confirming the conclusion of the absence of aldehydes.

In the writer's opinion, those ethers which show aldehyde and no peroxide are to be regarded as having been packed in an impure state. That small amounts of aldehyde will be formed during the process of ether manufacture is too well known to require discussion. Unless this aldehyde be removed entirely, it will be carried over and appear in the freshly prepared ether. In ethers showing peroxide alone, the warrantable inference is that the contamination has occurred after the liquid was sealed in the container. Where both peroxide and aldehyde are present, the latter may represent initial contamination but more probably is the second phase of the slow oxidation of the contents of the can. Studies are under way at the present time to determine the effect of storage on aldehyde and peroxide formations, the influence on the same of various types of container and the physiological action of aldehyde and peroxide when present in known amounts in narcotic ethers. With the incomplete data available, no limit can safely be set to the time of storage. It is recommended, however, that ethers be dated and lots over three months old returned to the factory for examination. Experience may show that this time can, with safety, be materially extended.

This preliminary communication is made in the hope that it may assist other institutions in standardizing their supplies of anesthetic ether and indirectly assist the manufacturers in the maintenance of standard for their products.

*The writer is indebted to Dr. Frank L. Richardson of the Boston City Hospital for this sample and takes pleasure in acknowledging the courtesy at this time.

The author wishes to express his thanks to Marion D. Alcott, by whom most of the analyses given above were made.

PROPOSED NURSES' HOME FOR WESLEY MEMORIAL HOSPITAL, CHICAGO

By E. S. GILMORE, Superintendent, Wesley Memorial Hospital, Chicago

IN PLANNING a new nurses' home the trustees of Wesley Memorial Hospital have considered the needs and desires of the nurses. It is the belief of the hospital management that the care given by the hospital to its nurses is invariably reflected in the care given by nurses to patients. If the patients are to receive the kind of care they are entitled to and which the hospital desires to give them, the nurses must be properly housed and made to feel that their interests are always considered and provided for as far as possible by the hospital.

A spirit of loyalty to the hospital cannot be engendered or maintained in the nurse unless the hospital is loyal to her best interests. This means reasonable hours of duty for the nurse, ample time for recreation and study, skillful and generous care in case of sickness, proper vacation periods, and a thorough, systematic and complete course in nursing. It requires also that hospital and training school authorities recognize that a person old enough to be a nurse is old enough to be treated as a woman, not as a child, and is entitled to have her wishes given thoughtful and sympathetic consideration.

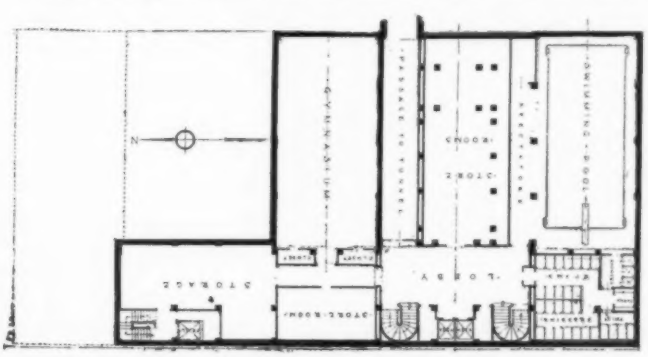
It is with these thoughts in mind that the Wesley Memorial trustees have chosen for the site of the nurses' home the property immediately across from the hospital. The two buildings will be connected by a subway so that the nurses may go to and from the home without going outdoors. The home will be a combined home, club and school. The building will be U-shaped, with enclosed court two stories high as a lobby and mezzanine. Entering from the street level the nurse will pass between parlors into a beautiful lobby, where she may receive her friends or chat with other nurses. Should she desire privacy, to which every young woman is entitled when entertaining her company of either sex, she may ascend the stairway to the mezzanine floor which will have ample accommodations for a dozen nurses to entertain their friends at one time. To the left of the lobby as you enter, occupying the basement and first story, will be a swimming pool, thirty feet by sixty feet. To the right as you enter, occupying the basement and first story, will be a gymnasium. At the rear of the lobby will be the elevators, running from the basement to the roof. In the second story over the swimming pool will be classrooms, consisting of a recitation room, a classroom for dietetics, a chemical laboratory and a library.

Over the gymnasium, on the second floor, will be a dining room, large enough to seat 200, at tables for two, four, and six. At the rear of the dining room, to one side, in an L, will be located the kitchens, store rooms, etc. There will be provision made for a wash room, where nurses may launder such lingerie as they do not wish to send to the laundry, and a sewing room for its repair.

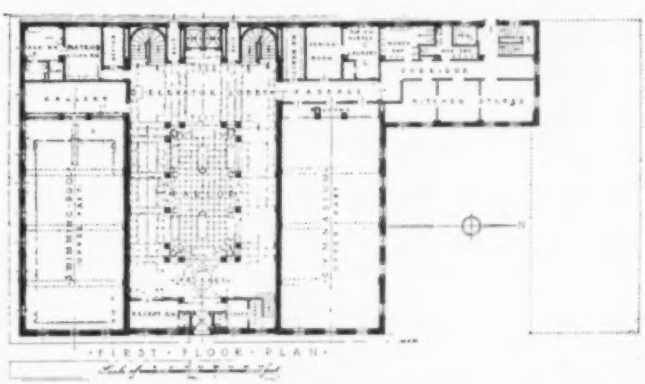
Nurses to Have Individual Rooms

Each nurse will have her own room; between each two rooms for nurses will be a bathroom. Each nurse will also have a closet large enough to contain her trunk and such clothing as would naturally hang in the closet. Head nurses will each have an individual room, closet and private bath. Assistant superintendents of nurses will have a living room, bedroom, closet and private bath. The

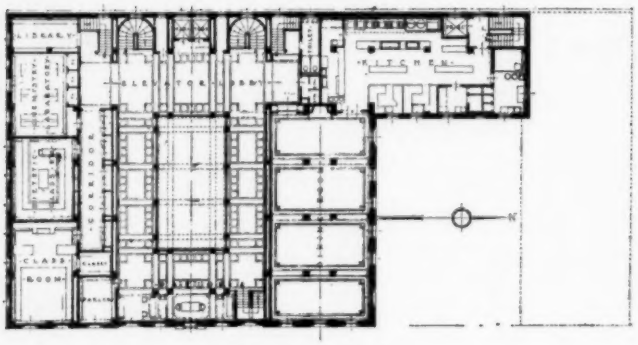
Proposed Nurses' Home for Wesley Memorial Hospital.



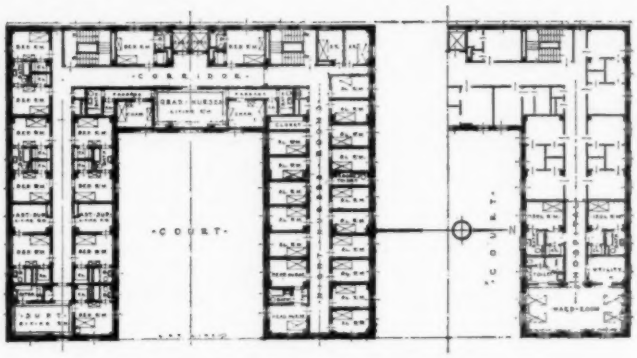
Basement floor plan.



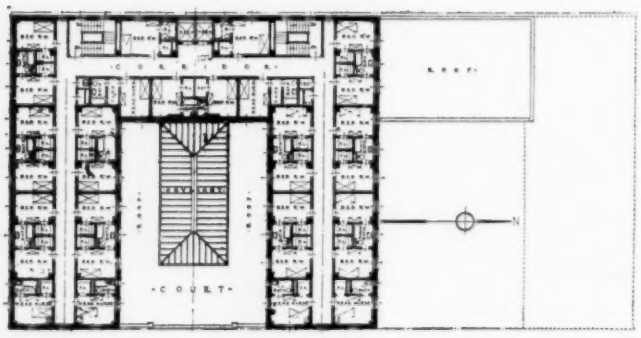
First floor plan.



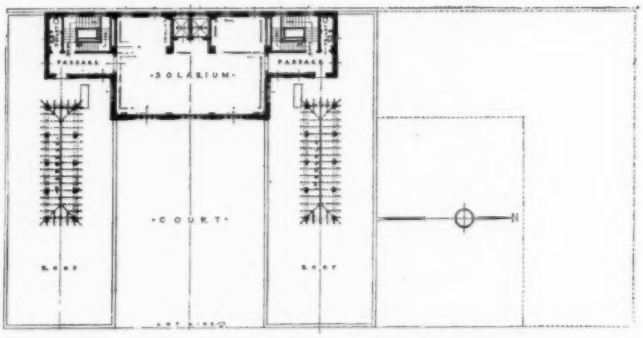
Mezzanine floor plan.



Eighth floor plan and north half seventh floor plan.



Second to sixth floors.



Ninth floor plan.

superintendent of nurses will have a living room, bedroom, closet, kitchenette and bath. Student nurses while on night duty will retain their own rooms and in addition will have small private rooms in which to sleep. These rooms for the night nurses will be isolated from the rest of the home so that their sleep will not be disturbed by the activities of others. There will be hospital quarters for sick nurses, consisting of a small ward for four, with utility room, bathroom, etc., and two private rooms, each with a bath, for nurses whose sickness requires such seclusion.

Graduate nurses who may be on special duty in the house and who do not care to go out during their hours off will have a lounging room. At their disposal also will be two private rooms with bath, should they wish to sleep during their hours off duty. Sufficient locker space to contain their grips and street clothing will be provided for graduates.

Roof Garden and Solarium Are Features

The home will have an enclosed roof garden, fitted up as a lounging room for nurses in negligee, and two open roof gardens, with pergola, where during warm weather they may secure the benefits of the breezes.

The building is to be of reinforced concrete with pressed brick facing, eight stories high with an English basement and the roof garden in addition.

The nurses' home will have its own chef and other kitchen employes and waitresses, so that the nurses may be supplied with the food best fitted for them and most to their liking. A physical directress will be placed in charge of the gymnasium and swimming pool.

It is the belief of the trustees and management of the hospital and training school that this building will give the nurses every opportunity for rest, relaxation, comfort and development. It is the management's belief that the nurses are entitled to all these things.

Gold that buys health can never be ill spent.—John Webster.

ROUTINES OF MATERNITY CENTER

Routines evolved by the staff of the Maternity Center Association at 370 Seventh Avenue, New York, have been published in pamphlet form. The pamphlet contains rules for the conduct of the clinic, the doctor's duties, standard clinic equipment, routine for prenatal visits and a supplement of advice to mothers. The details of the routines were decided by staff vote of the Maternity Center Association after discussion of methods that would meet the requirements outlined by the medical board and nursing committee of the organization. Instructions to staff members are that if any member in trying to follow the routines thinks of an improvement, her suggestion will be taken up in staff conference and the majority vote will decide its adoption.

SOME POMES

Written by a sick man in Burlington, Vt.

TO MY WIFE

This hospital life is certainly hell.
I don't like the girls and I don't like the smell.
And I think as I lie on this damnable bed,
And I ache from my feet to the top of my head,
If I ever get back to my own little home,
Where I don't have to hear them all holler and groan,
I'll settle right down for the rest of my life,
And stay in ev'ry ev'ning with the kids and my wife.

TO MY FRIEND

This hospital life is certainly fine,
The nurses are great and their faces all shine.
There's one looks to me like a million or more,
And I try to buck up, by my "tummy's" so sore.
I lie here and rest on the nice downy bed,
And I feel the sweet warmth of her hand on my head.
And I think that I soon will be back to the life,
And be bossed as before by the kids and my wife.

—*A. M. A. Journal.*

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
Western Reserve University, Cleveland, Ohio

PUBLIC HEALTH AND PUBLIC LIBRARIES

BY FLORENCE BRADLEY, EXTENSION LIBRARIAN, HEALTH LIBRARY OF COMMON SERVICE COMMITTEE, NEW YORK

IF THERE are two professions the development and expression of which could be claimed as typically modern, democratic and American, they would be public health and public library work. Dealing as they do with the same groups of people, receiving their support from like sources, they should contribute to the general public welfare by consciously supplementing each other's activities. But this they do not always do. It is strange that there should be any need for reconciling public health with public library work, yet it is true that up to the present certain barriers and restrictions have existed between them.

There are two reasons why the library profession must become interested in public health: first, because the health world has developed so many special libraries that it has contributed somewhat largely to this particular development of library work, and secondly, because the library profession is fundamentally interested in all matters that concern the development of literature. The library world can no longer be unconscious of the fact that a new form of literature is beginning to present itself and that new educational forces are setting to work, all the more important because based upon a scientific knowledge and technical form of education. The question is, what relation does this bear to public libraries in general? Are the present barriers and restrictions between public health and public libraries to remain or can they be cleared away? Do public health workers need the help and support of the entire library profession or simply of a part of it?

Pink Sheets First Health Literature

Before answering this immediate question it might be well to consider what is meant by health literature. So far as libraries and librarians are concerned, health literature meant in the beginning thousands of pink and yellow sheets with large printed warnings against plague and pestilence. But we now know that health literature means something quite different from this earlier conception. Based entirely upon medical literature, we may recognize this off-shoot as playing a quite important part. In spite of its having been called both "propaganda" and "popular literature," it seems to have come to stay and refuses to be detached from home and community life. When the property owner wants books on sanitation, the club woman asks for references on child welfare, the public health nurse seeks material on the social aspects of her work, and the teacher searches persistently for health "stories," why not recognize them all as expressing a need for the same thing—good, authoritative health literature. To be specific, we mean books dealing with social hygiene, mental hygiene, health administration, community sanitation, child welfare, public health nursing, tuberculosis, etc.

Until recently requests for books like these came only from the specialist. They did not find their way into the reference rooms of public libraries, but remained within the province of the special library. Now that they have literally broken loose upon the community, the point of meeting them adequately must be considered. To do this, shall we cling to the special library, finding it where and when we may, or shall we summon to our rescue the public library? Is it possible for public health and public library to meet upon the common ground of community education?

To recognize that this can and has been done, it is only necessary to look about and observe other specialists within our communities who draw upon public libraries for their book support. Perhaps it was the teachers who first approached public libraries for group support, that is, the allowance of a fair share of the library's budget for such technical literature as pedagogy, nature study and child training. Such requests were not only granted by all public libraries but looked upon as legitimate library business. No sooner was this an accomplished fact than there appeared a new community worker. She was called a "social worker" and came from a settlement house, asking for much stranger books than teaching—books on social work, books on the community, books for meetings, reference collections within the library and special deposits outside the library. The social worker asked a great deal of libraries, but in return gave much, for it was she who began to urge librarians outside their walls and introduce them to their communities. This was most fortunate because of the next representative, the all demanding Americanization worker, a combination of teacher and social worker who needed not only a special selection of books, but in quantities that were staggering, such as primers and duplicates of primers for those underfed and malnourished minds of the communities so recently discovered by the social worker.

Amateur Library Service Threatens

Who shall be next is not for the librarian to say, but it would seem logical for the public health worker to declare himself (and herself) as soon as convinced of the

trustworthiness of libraries and librarians. In the meantime, there is but one course of action for all: to depend upon the special library. For in every way that the special library is serving its experts, just so much is it guarding the public library—warding off the specialist and protecting book appropriations from the heavy inroads of scientific literature. Especially has this been true in regard to medical literature. So long as the circulation of health literature is confined to the special library by doctor, health officer, training school director, and public health nurse, so long will public libraries evade the issue.

While we are deciding what is eventually to be done, there is a danger to keep in mind that would naturally be apparent to the librarian. It is the inclination to expand book collections or private health libraries into so called library services. For obvious and various reasons, health department budgets will seldom provide the salary of a librarian, yet the amateur library service will be established in proportion to the spread of public health work. Already we hear of new library schemes for health workers. In monthly health bulletins, we discover "library reports" and "library statistics." On investigation the source of these reports is sometimes a room with a

A corner of the Health Library of The Common Service Committee, 370 Seventh Avenue, New York.

glass door bearing the word, Library. Inside the custodian is perhaps scrubbing the floor. Instantly there returns to mind visions of the pink and yellow sheets—health literature, such as, "Do not cough!" "If you sneeze!" But on the contrary, what is labeled "library" is indeed "library" for its shelves are well filled with books, pamphlets, clippings, historical material, new reports. Such material is worth reporting in health bulletins but only if under the expert care of the classifier and cataloger who will in turn attend to proper methods of circulation so that health officer, public health nurse and all other community workers shall have access to these valuable guides and aids.

It is the economic side of all this that really appeals to the librarian. She cannot but question the spending of both time and money on the establishment of libraries outside of libraries. She would concentrate libraries within libraries. Why does a state board of health develop its own package library instead of supporting the extension service of its state library? Why do rural nurses spend even the smallest part of their salaries on books to circulate among county families instead of helping to build up their travelling libraries? Why do hospitals arrange book deposits for their patients, but not for staff or training schools? All these are the legitimate forms of state and public library work that would serve health workers fully and constantly, if the workers could in turn spend only a little time explaining and interpreting the aim and purpose of their undertakings.

It is more than a simple coincidence that while a state health department often presents an honest claim that there is not a single book in the travelling library department for either health officer or public health nurse, the state librarian can equally well answer that she buys not a book on community sanitation or school nursing because she knows it will stand on the shelf unused from year's end to year's end. Such a condition of affairs must be only because of lack of understanding between these two professions the members of which have been so busy following the fast and furious development of each day's work that they have not had time to see how closely their interests could be interwoven.

A glance into national library organization shows that the administrative machinery is not unlike other national bodies. There is an American Library Association, state libraries, commissions and associations, with committees on institutional work, extension and travelling libraries based on county plans, town libraries and city libraries with systems divided into departments and divisions just as are departments of health. It is a perfectly logical scheme that has been moulded by public needs and developments, permanent but elastic, adapted to any change and reorganization that may be indicated by future needs. Will none of this fit the needs of community health?

* * * * *

These are the main phases of the whole question as revealed to the Health Library of the Common Service Committee in its work with field health workers and public libraries. The Health Library is essentially a special library, but being a national one it maintains a unique position. It stands so to speak on the border line between the professional and non-professional world and because of this has some opportunity to help interpret the one to the other. Within the Health Library there are two services that work very closely with each other—the reference department and the extension service. When requests come to the reference department indicating new undertakings of field workers, they are in turn referred to the extension service for suggestions as to forms of book and library support, based as fully as possible upon local facilities. By this constant interplay between national and local library, special and public library, it will be possible to continue to suggest various forms of cooperative effort between librarian and public health worker, but after all is said and done it is largely a matter of local supply and demand, demand and supply, between professions. Or, shall we put it in terms of the "community minded" and say coordination of state and local activities? What the Health Library may do is no more than the mere pointing out of ways and means of applying the technical and material support of the library profession to the needs of the medical and nursing profession in their community work.

That libraries and librarians have been overdiscriminating in the past as to health literature may possibly be granted, but because of this very hesitation and delay have not the makers of health literature had time to formulate standards of work that will produce a sturdier and more genuine form of literature, one that will not need any championing? From our traditions, comes our literature.

HERE WE ARE!

By LINDA A. EASTMAN, Librarian, Cleveland Public Library, Cleveland

WHAT would be the present state of progress of the world, had printing never been invented? Certainly centuries behind what it is today. Modern life without books is inconceivable, but books, through their very multiplicity and diversity, have brought the need for specialized service to make them useful.

So here we are, librarians, the organizers and dispensers of books and other printed matter, and here is the public library, whose mission it is to make books available when and as they are needed.

That the Public Library can function as an important aid to the cause of nursing education, to nurses themselves and to our hospitals in various ways is becoming more and more obvious to nurses and to librarians alike. This mutual recognition of the desirability and the possibilities of such aid is the first step toward practical cooperation.

A few of the opportunities which the Cleveland Public Library has found for service along these lines may be suggestive of still further helpfulness.

Of primary importance to the nurses' training schools is the ever present question of recruiting. The Cleveland library is compiling a list of the best suggestive material to be used in connection with the talks on nursing given in the vocational courses in the high schools and for individual inquirers who may come to the library.

Few nurses' training schools have anything approaching an adequate school library. This deficiency can be met only in part by the public library, but the schools which are endeavoring to use its resources are finding valuable supplements to their own rather meager supply of professional literature and a rich mine of material in the broad general fields of public health and social service. The Cleveland library is loaning this material not only to instructors and student nurses on individual request, but through its stations' department it is sending books out to several of the hospitals and to the Nursing Center for the classes there. As the instructors learn to send in their orders long enough in advance it will become possible for the library to meet more of their demands by the purchase of books not already in the collection. Many specialized books on nursing subjects it will probably never get, these being within the more definite province of the school library, but much that is wanted can properly come within the scope of the public library collection.

Cleveland Library Aids Student Nurses

Perhaps of even greater importance than the furnishing of books in connection with the study courses is the stimulation to recreational and cultural reading which most of the student nurses need. There should be, of course, a carefully selected, well-stocked library of recreational books for both nurses and patients in every hospital, but until there is the public library can do something to supply this lack to the student nurse. The Cleveland Public Library is sending to each class an invitation to use the main library or the nearest branch library, and with the invitation go application blanks which can be filled out in advance to serve as a reminder and to simplify the process of procuring a card. The library bulletin, the *Open Shelf*, containing annotations on the new books, is being sent to each of the classes for distribution to the students, and from time to time such book lists as may arouse interest in various books or subjects. A list of cheerful books for reading aloud to patients is one of the lists available. *Talks on books and on the pleasures of reading have been given by members of the library staff to one or two of the schools, and more frequently to groups of students and nurses at the Nursing Center, where it is hoped eventually there may be a regular public library station.* Some of these talks at the Nursing Center have attracted audiences of 200 or more and have aroused considerable enthusiasm. Just the other evening, at one of our largest hospitals, some fifty student nurses enjoyed to the full a lively discussion of some of the notable books of the year, and commented afterward on the refreshment of mental outlook it brought them after a particularly strenuous day.

"It is the glory of great poetry or great fiction that these forms of literature develop within us our sympathetic understanding of moods and lives that perhaps are not our own. By grace of the poet and the story-teller we may live a thousand lives in our three score years and ten. Without them we should be condemned to live solely in the little cabin of our own experience, and be in no better case than the rustic who has never travelled further than fifteen miles. For the highest imaginative literature 'deals with facts' that are of much greater significance even than the fluctuations of the money market or the results of a political election. It deals with the facts of the soul, the emotional experiences of men. A great imaginative writer expresses the profoundest or the subtlest of such experiences," wrote Clifford Bax in his little book on *Friendship*.

Hospital Should Have Trained Librarian

Nurses, like teachers and librarians, need to know how to use books as tools in their work; not only should they learn to read for the invigoration of their own mind and spirit, but also to pass on their treasure-trove to those who came, sick of body or of mind, under their care. Physicians are more generally recognizing the very real therapeutic value of properly selected reading in the treatment of many cases, and frequently to the nurse falls the choice of the patient's books. John Kendrick Bangs, that genial humorist whose own writings have brightened many a sick-room, and whose pen has just been laid down forever, wrote a serious article for the *Bookman* about a year ago, in which he said: "If I were a doctor I should make books a part of the materia medica, and prescribe them for my patients, according to their need. Over the door of the library at Thebes were inscribed the words, 'Medicine for the Soul,' and Diodorus described books as 'the medicine of the mind.' I can personally testify out of a rich experience to the medicinal value of books. Many a time have I wakened in the deadly darkness of the night, gasping for breath, with an acute indigestion, and, feeling myself on the verge of dissolution, lit my lamp. And in the breathlessness of some great book, such for instance as Victor Hugo's indictment of *"Napoleon the Little,"* I have as by some homeopathic magic found almost immediate cure of my own. A course of Mark Twain and Bernard Shaw is good for any man's liver; and I cannot even estimate the number of occasions when, afflicted by insomnia, I have wrestled sleep from the pages of books which I shall not name, as freighted with the anodyne of slumber as any poppy-field from Hindustan to Ponkapog. Literature contains the herbage of thought

that cures. Whether used as anesthetic to soothe a distraught nerve, or as tonic to stir to action a sluggish circulation, books serve the purpose."

Dr. Cary T. Grayson, in an interesting article on *Books as a Mental Diversion* in the same magazine, emphasizes the great importance of choice of reading for certain types of patients.

The time should come when every hospital will have not only a carefully selected and well-stocked library for nurses, interns and patients, but a librarian trained as a specialist in books for hospital use; this librarian should have a recognized place on the faculty of the nurses' training school, just as the librarian-teacher is already coming to have on the faculty of the normal school and the high school. Toward this end the public library can do something to point the way; when the end is attained, there will probably be still more ways in which the public library can be of service because the trained hospital librarian will in turn see more opportunities for utilizing its resources.

In the meantime the partial service which the public library can render is so superior to no service, that those schools which are taking full advantage of it are wondering how they ever got on without it. Here we are, the librarians and the public libraries, free for all—use us!

DINNER HONORS MISS MAXWELL

IN THE spring of 1921, at the time of Miss Anna M. Maxwell's retirement as director of the school of nursing of the Presbyterian hospital, New York, it was suggested that a dinner be offered her in recognition of her services to the community. Miss Maxwell regretted that the pressure of work incident to her retirement precluded her acceptance of the honor. Upon her return from a long holiday in Europe, her consent was again sought and was finally won on the plea that an opportunity would thus be given not only to recognize her achievements, but to say "Welcome Home."

The executive committee on arrangements for the dinner consisted of Miss Mary Parsons, chairman, Miss Mary Magoun Brown, Mr. Thatcher Brown, Miss Anne E. Goodrich, Miss Jessie M. Murdoch, Miss Adelaide Nutting, Miss E. E. Pearce, Miss Blanche Potter, Mrs. John I. Pratt, Mrs. Whitelaw Reid and Miss Lillian D. Wald.

A large committee of 150 was formed representing the great variety of community interests in which Miss Maxwell has taken a definite part. Thus there came together at the Biltmore Hotel, on the evening of February 1, 800 of her fellow workers and friends of the professional and social world. A reception preceded the dinner after which Dr. John H. Finley, chairman, with the guest of honor, led the way to the banquet hall.

Dr. Finley developed an interesting program with not only a fine conception of its significance, but with that light touch of humor which distinguishes his rare gifts. Early in the program, a greeting from Miss Louisa Lee Schuyler, the honorary chairman, was read by Dr. Finley, who designated Miss Maxwell as "that wonderful woman to whose initiative is due the first conception of a school of nursing in this country." Her message follows:

"I wish to add my word of affection and esteem to the many tributes which will be showered upon you by your friends assembled this evening to do you honor.

"You are the dean in this city of your noble profession of nursing; and the school of nursing of the Presbyterian hospital owes the high standard it has reached and maintains today to you, as its director for thirty years, to your power of organization, your executive ability, your genius in the art of teaching, and your strict discipline, so tempered by justice and kind-heartedness, that each pupil has accepted it as suited to her own individual need.

"God bless you, and keep you with us in health and happiness for many years to come!

Louisa Lee Schuyler."

Miss Adelaide Nutting gave a brief, masterly survey of the development of nursing in America, portraying with what vision, as a pioneer, with what wisdom and enthusiasm, through long years of heroic effort, Miss Maxwell had made her contribution towards perfecting a system of technique and standard of ethics upon which alone the usefulness and strength of the nursing profession can be maintained and developed.

British Nurse Cables Appreciation

A cable was read from Mrs. Bedford-Fenwick, President of the National Council of Nurses of Great Britain, as follows: "National Council of Nurses Great Britain, offers Miss Maxwell warm appreciation of splendid life's work for nursing and humanity." This message was followed by one from Dr. Hamilton of the Protestant Hospital in Bordeaux—"Hail Miss Maxwell! Fairy Godmother of the Bordeaux School."

The next speaker, Dr. George E. Brewer, carried one swiftly from a consideration of ideals to their practical exposition. As consulting surgeon of the First Corps of the American Expeditionary Forces, Dr. Brewer was director of the British Base Hospital No. 2 to which the Presbyterian Hospital Unit was assigned during the war. His thrilling testimonial of the courage and efficient service of this unit during times of danger emphasized his belief that this was due not only to the character of the individuals, but to the spirit of the school of nursing of which they were examples.

The American Red Cross was represented by Mrs. August Belmont who paid a generous tribute to the nursing service as an integral part of that organization. Mrs. Belmont traced Miss Maxwell's energetic cooperation at the time of the organization of the Red Cross and recognized her signal services during the period of the war. After recounting a charming story of an old servant who wanted her sick mistress to have her roses "when she could smell 'em," Mrs. Belmont added "and *you*, Miss Maxwell, should have *your roses* when you can *smell* them!"

Dr. Haven Emerson devoted a few moments to the subject of the development of the nurse herself as the link between the doctor and the patient. Dr. Emerson indicated that, in his opinion, the success of public health work depends in the last analysis, upon the intelligent enthusiasm and cooperation of the nurse.

To Miss Lillian Wald fell the pleasant task of describing the development of that branch of the nursing profession which finds a noble expression in the settlement work of Henry Street. An account was given of the difficulties of the early days when the present scope of the work was only dreamed of and when Miss Maxwell stood behind the project as one of its staunch supporters.

The program was interspersed with the reading of telegrams of congratulation and good wishes from a num-

ber of organizations among which may be mentioned the National League of Nursing Education, The State League of Nursing Education, the American Nurses Association, the board of trustees of the Presbyterian Hospital, and the Army Nurse Corps. Messages came also from many friends of the medical profession among which may be quoted that from the dean of the Medical School of Columbia University. "I regret exceedingly my inability to personally express my sincere appreciation of all that Miss Maxwell has contributed to nursing and to medicine. Her example and influence will be a permanent memorial. May she live many happy and useful years!—William Darrach." And also the following from the dean of the medical profession: "Many thanks for invitation. Regret extremely that I cannot accept. Miss Maxwell's services merit every tribute of respect, admiration and gratitude which can be paid her. Please give her my cordial regards, felicitations and best wishes. William H. Welch."

Greetings were brought Miss Maxwell from Miss Hilliard, representing the Alumnae Association of St. Luke's Hospital; from Miss Riddle of the Alumnae Association of Boston City Hospital; and from Miss Cadmus of the Alumnae Association of the Presbyterian Hospital.

The closing address was made by Miss Anne E. Goodrich. For the moment the record of achievement was forgotten in the vivid portrayal of Miss Maxwell as a friend. The quick sympathy, the unfailing interest in human effort, the love of the world—books, music, travel—and above all, that "sporting spirit" were drawn with skillful hand, leaving to memory a radiant tribute lavishly paid to a living friend.

In response, Miss Maxwell conveyed her deep appreciation of all that had been said by her friends but acknowledged herself as only an instrument by which the work had been accomplished. Miss Maxwell attributed whatever success had been attained to the faithful cooperation of the board of managers of the hospital and to the spirit of youth which came into the school of nursing with each new class. Thus sharing the honors with those who shared the labors, Miss Maxwell said "Adieu."

MISS E. E. PEARCE.

"But it is far more difficult to get people to avoid poisoned air (than poisoned water) for they drink it in by the gallon all night in their bedrooms and too often in the day."—Florence Nightingale.

THE "THRILL" IN NURSING*

"Mrs. John A. Sinclair, one time Aileen Cleveland Higgins, has written in her textbook, 'The Psychology of Nursing,' these lines, which I trust will sound familiar to members of the senior and graduating classes of our training school:

"'To nurse a human being back to his place in life has an unending thrill to it. Sometimes a sickness may readjust the patient's idea of living. He may get something spiritual out of his sick-room experience.'

"I think we will agree with Mrs. Sinclair that to 'salvage what is left of a human being is one of the greatest triumphs a nurse can achieve.' Perhaps it is one of the greatest triumphs anyone can achieve.

"Mark Sabre is a pathetic hero of a popular story, 'If Winter Comes.' Mark Sabre was wont to say: 'I can see that he is right,—from his way of looking at it.' The way of looking at things does make a great difference. If we recognize routine duties which are a part of training as a means to an end, there will be nothing menial or disagreeable in the long months of training. We may glory that we have a part in bringing someone back to his place in life, if we can 'feel the thrill of it.'

"It is my hope for each one of this class that she may think of her work in such a way that the thrills will come.

"I would have the thought that includes this hope my contribution to the memories of this evening."

*The brief address to the graduating class of City Hospital Training School, Worcester, Mass., delivered on December 16, 1921, by Dr. C. A. Drew, superintendent.

SIXTY-SIX ENROLL IN PENNSYLVANIA PRELIMINARY NURSING SCHOOL

The experimental semester of the School for the Teaching of Preliminary Courses in Nursing Education was begun February 2, at University of Pennsylvania, Philadelphia, with an enrollment of sixty-six students from the training schools of eleven hospitals.

Miss Sara Murray, R. N., educational director of training schools for nurses in Pennsylvania and chairman of the joint committee, presided.

The students were addressed by Dr. Simon Tannenbaum, president of the Philadelphia Hospital Superintendents' Association; Miss Alice Garrett, R. N., president of the Philadelphia League of Nursing Education; Miss Roberta M. West, secretary-treasurer of the Pennsylvania State Board of Examiners for Registration of Nurses; Miss Margaret Dunloy, president of the Graduate Nurses' Association of Pennsylvania, and Miss Anna Garrett, president of District No. 1, Graduate Nurses' Association of Pennsylvania.

Instruction is being given at the Drexel Institute on Mondays and Tuesdays in nutrition, cookery and applied chemistry by the regular instructors of the Institute. On Wednesday, Thursday and Friday, volunteer nurse instructors, most of whom are loaned by hospitals, are teaching anatomy and physiology, elements of psychology, personal hygiene, and hospital housekeeping; these subjects to be followed by elementary bacteriology, drugs and solutions, bandaging, and history of nursing, including ethical and social principles.

This school is being supervised by a joint committee composed of representatives appointed by the Philadelphia Hospital Superintendents' Association, the Philadelphia League of Nursing Education, the Instructors' Section of the League, and the Pennsylvania State Board of Examiners for Registration of Nurses.

TO SURVEY CANADA NURSING FIELD

Dr. M. T. MacEachern, superintendent of the Vancouver General Hospital, has been made director general of the Victorian Order of Nurses for Canada and upon invitation of the board of governors will make a survey of the need for nursing service in Canada, how far that need is being met by any existing agency and what further part the order should take to meet the need.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

HUMANIZING THE HOSPITAL KITCHEN*

BY MARGARET PROCTOR, ECONOMIC SECRETARY, NATIONAL BOARD OF THE Y. W. C. A., WASHINGTON, D. C.

THE subject of this paper was to be "Placing Equipment." This is somewhat of a hobby of mine, and I don't usually refer to it under that name. I would very much rather call it, and I very much prefer you to speak of it as, "humanizing the kitchen."

Appreciation is one of the main things in our attitude of mind towards humanizing the kitchen. We are given a new problem to attack. The first thing is to sort out the kinds of things that are correlated, one to another.

At the entrance of your building, the door of which must be on the street level convenient for all types of vehicle delivery, we have arranged all kinds of scales and weights, checking systems, tally cards, time cards, etc. Everything is received here, whether it be a bag of rice or an employe. He or it is checked up. Control of that department is held by one person for a limited period, probably eight hours.

Great storerooms can be arranged near the entrance for different types of food stuffs and other supplies in reach of the elevator. On the other side of the entrance is a reception hall, lockers, toilets and showers for employes. We think that an employe is entitled to be kept decently and I know from having worked around in hospitals and institutions of different kinds that at the end of a hard day in a kitchen a person is pretty hot, tired and disgusted. If she can have a shower she goes home feeling respectable. That moral tone we make an effort to keep in our employes. The women's locker rooms are provided with a rest room in which are sanitary couches with washable covers that can be changed as often as necessary. That we find holds employes a great deal better than many other concessions we might make them.

Adjoining the service rooms for employes and food stuffs, we have the garbage disposal rooms, which in our new buildings are being supplied with freezing apparatus. All of the garbage that goes out of our new buildings is frozen. The garbage is kept at a point very much below twenty degrees, and there is no odor. It is not an objectionable back door in any sense of the word. People are living there, holding their jobs there for a given number of hours a day, and it must not be objectionable.

When we reach the kitchen proper we think again about correlating the living conditions of all the people who work in the kitchen; to this end the employes' dining rooms are placed as near the kitchen as possible. In many institutions we have the employes under the kitchen and the food, by elevator, is sent down to their steam tables. We always try to put the employes' dining rooms in a corner of the building so they can have, during their leisure hours, outside air to breathe. We try to arrange separate dining rooms for men and women. If the employes are colored and white, as is often the case, we have the dining rooms divided. People prefer to eat their own kind of food with their own kind of people in their own way. This preference can be met by a judicious arrangement of the dining room spaces.

The kitchen is the heart of the institution and it ought to be housed in as much sunlight as possible. Think of the electric bills that can be saved with kitchens on the roof rather than in the basement. The work accomplished in a kitchen or bake shop is a fine highly trained art, and it is so much more worth while if it is done under pleasant surroundings and in sanitary and hygienic surroundings. This cannot be accomplished underground.

Easier to Tear up Paper than Bricks

When planning a building you can well spend a lot of time in study. I draw and redraw, plan and replan dozens of times until finally I know that every single chair is going to have elbow room all the way around it, that the chef in moving between his range and cook table is not traversing a general runway and that the baker is not going to cross the chef (they will cross each other mentally, of course) during the process of a meal.

When you are making plans for a building, therefore, remember that it is a great deal easier to tear up paper than it is to move bricks. If you could see the buildings I am asked to inspect you would be thunderstruck at the lack of vision the builder had in developing a thing that is a positive fake, that doesn't function.

Keep down your overhead by using your head. Place all your equipment so that your worker can see what she or he is doing at all times. Turn the range so the cook can look into the oven without having to pull the food out.

Arrange everything that may drip or produce steam in one space. That is, all the ranges, steamers, stockpots, etc., should be set inside a curb with a drain.

We don't ask our employes to work eight hours a day on a cement floor. We give them a maple mat to stand on. There is nothing harder on back bones, nothing less resilient than a cement floor. Over this equipment we arrange a hood; into the hood we put a gutter which is connected with a vent, and the vent drips into the drain.

*Read at the last meeting of the American Dietetic Association, in Chicago, Oct. 24-27.

Around that we wire for electricity, and we have adequate bulbs. The inside of the hood is kept much cleaner and the chances for accumulated dust dropping on food is much less if the inside of the hood is well illuminated.

We also arrange over the tops of the ranges, because many of our cooks use top stove cooking very much, a cold water tap. It saves the back of the chef and his assistants not to have to lift an ungainly piece of equipment from the top of the range over to the sink and back to the top of the range. We bring the water to the range, turn on the tap and that is all there is to it.

I recommend strongly that you have at least three inches of air space under your range. When we opened our cafeteria here on Monroe Street, we had a fire the first day. Ranges must have air below, behind and at the sides. Then I would like to recommend the kind of range that saves the chef. There are now ranges on the market that are so arranged that all the heat is generated in the center. The heat is not blown in by a blaze across the front.

One man told me his kind of range was the best. He could get the front of it up to 1,500°, and he looked proud when he told about it. What on earth does anyone want of a range like that when water boils at 212°! That is an expensive range to buy.

There is a range that generates heat in the center and it is quite cool. I have worked in front of that range. The chef's temperature and temperament are kept at a good working pitch many hours of the day longer because he is not overheated.

Height of Sink and Tired Backs

The top of the range brings me to another hobby of mine,—the height of things. During the summer of 1915 I was busy building dormitories for students and had a great deal of unnecessary correspondence and many conferences with sink people in the United States. They wanted us to have sinks thirty to thirty-two inches high, and so I finally invited one of the salesmen to come in one day and wash dishes in front of that sink for half an hour to see if he would like to have it for his job. He said he guessed he wouldn't. We put our minds on getting that sink up and the standard height is now thirty-six inches. We have remedied this one thing in institutional work but the private home is still unaided. I would like to see the proper height of the sink made a requirement in every apartment house contract. The bottom of the sink should be brought up to fourteen inches. The sink should be of galvanized iron, welded, with rounded corners. The splash board should be at least ten inches up and a part of the drain board. To save the floor in front of the drainboard we put a little curb about three inches high so that the kitchen is kept in much more sanitary working condition.

The height of the range, the height of the cook's table, the height of the shelf under that table are other things which should be remedied. All shelves should be at least ten inches from the floor. The old baseboard used to be seven inches and we found you couldn't get a broom or a mop under a seven-inch baseboard to keep it clean. We raised it to ten and have had ample opportunity to try it out; it works.

The table is something that should be designed for efficiency. The type we recommend most frequently has a cold rolled steel top. It has a long drawer that opens at either end so that the employe working in front of a stove does not have to walk around the table. On top of this table should be a triple pot rack, supported and suspended.

Where refrigerators can be best placed is something to think over carefully. In one building I found that the refrigerator and the range were back to back and the management wondering why costs for ice were so high. Another thing that it is necessary to watch is the number of times refrigerators are cleaned, inside and outside. The question of lining is of vital importance. Spruce linings are perfectly good, but galvanized iron chips. One of the most important things to look to in a refrigerator is insulation. None of the fancy named packings are durable, every bang of the door jars them and they settle. The best insulation is cork board laid on in broken joints.

Now we come to the bake shop. This, by the way is a separate room. The chef and the baker are two artists. They are notoriously tempermental and do not get on where they have to work in close quarters. If you can give them each a working space which is his own domain, where he can be supreme, you get a much better product and you hold two efficient employes instead of two wrangling unhappy individuals. In putting in bake ovens and proofing boxes, allow a little space between. I have been in places where the proofing box was jammed up close to the bake oven. In planning a bake shop keep in mind the size of a great many of the tools, and give the baker elbow room and arm room, and lots of it.

Have everything that has to go out to the serving room on wheels. Pie racks should be made just wider than a ten-inch pie pan. These can be stacked up and run out of the bake shop.

When it comes to the question of labor-saving devices, let me say, have as many of them as you can afford to install. It is better to earn them before you put them in. No matter where you are your labor saving devices help you out, and if you know the principle of keeping them oiled and in working condition you have a satisfactory and adequate assistant, the value of which I think has never been estimated. Saving in labor and costs have never been adequately estimated. There is one thing, you can meter what they eat. I know just how much electricity and how much water they take and those are the things of which you can keep absolute control. I advocate that mechanical devices be installed as far as possible.

In considering kitchen equipment think of its relationship to the employes, and a good way to feature the things you are trying to get across is by means of an S.U.S. Club (Stand Up Straight Club).

If you aim to have things so that everybody does that there will be no bent backs in your kitchen.

NEWS ITEMS

Miss E. M. Geraghty is the new director of the department of dietetics at Lakeside Hospital, Cleveland.

Other changes of address have been reported to us as follows: Katherine Dixon has gone to Rome Hospital, Rome, N. Y.; Margaret Anderson left Cambridge Hospital and will travel in California for a time; Helen Clarke is studying at Ohio State University with a major in home economics and a minor in medicine; Carolyn King has gone from the University Hospital, Charlottesville, Va., to Grace Hospital, Detroit, Mich.; Bertha Baldwin, formerly at Freeport, Ill., is now at the House of Sarah Field Splint, New York, N. Y. Miss Baldwin is also conducting a department in the American Food Journal.

The Dietetic Association of Southeastern Michigan held a dinner on March 2 at the College Club, Detroit. Miss Rena S. Eckman of the University Hospital, Ann Arbor, gave a very interesting paper on "The Responsibilities of the Dietitian." Recent publications were discussed by Miss Wilson of Cass Technical High School, Detroit.

NUTRITION WORK IN A HOSPITAL DISPENSARY*

By ESTHER H. FUNNELL, Social Service Dietitian, Harper Hospital, Detroit

NUTRITION has come to mean more than the science of what to eat and why. At best, it is not easily defined and is difficult to determine because of the interdependence of the contributing factors one upon the other. In the present day vernacular, however, it has come to be used synonymously with the word health as applied to the child. Fritz Talbot has written: "Good nutrition means a well-nourished and developed child as described by a normal physical examination." Dr. Ira S. Wile concludes a discussion of the question as follows: "We now speak of nutrition as an index of health. Good nutrition is the equivalent of good health and malnutrition is the equivalent of ill health."

In recent years so-called nutrition work has become very popular and is an important part of the nation-wide health program which is being launched today. We will find the work being done in the form of health centers, nutrition classes and various other enterprises in connection with public schools and private organizations. Community houses, church societies, hospitals and welfare societies of all kinds are finding a place on their program of activities for nutrition or health work.

Every hospital dispensary should include in its plan for development, ample provision for the establishment of nutrition work. This work, however, will not be confined to the organization and conduct of nutrition classes for children. We will find here, as in the hospital itself, cases of diabetes, nephritis, gastro-intestinal disorders, and obesity, not to mention the large percentage of patients complaining of chronic constipation, all of whom will require dietary supervision. The person appointed to this work must be at once a nutrition worker and a dietitian. Her training for this undertaking should consist of at least a four-year course in an accredited school of home economics, with a thorough knowledge of food values, cookery and dietotherapy, as well as additional training in social service.

Dietitian Should Interpret Prescription

A competent worker of this kind will prove herself of inestimable value to the medical staff of the dispensary, if her position in the work is definitely understood. At no time should the dietitian attempt to diagnose a case and prescribe a diet for its treatment. Let the physician make the recommendation and the dietitian interpret this in terms which the patient can understand. She will be able to do this the more intelligently because of her knowledge of the dietary customs of different nationalities. She will not prescribe bread, in terms of slices to a Syrian patient when she knows the size and shape of the Syrian loaves of bread. Neither will she suggest beefsteak and lamb chops to a family dependent upon the department of public welfare for its bare existence. If as in so many cases today there is no income, the dietitian trained in social service will know the resources of the community from which she may expect to secure supplementary aid for the patient. When faulty food habits are due to ignorance, the dietitian goes into the home of the patient and in a friendly way can teach her how best to prepare her food according to the utensils available and the extent of her limited income. After extensive experience of this kind, she is able to judge merely from an interview with the patient approximately what is the home background and can better adjust the diet to the needs of the patient.

Many of the patients can be cared for in groups. At the present time there are a number of dispensaries which are featuring diabetic clinics. A clinic of this kind should be conducted by a physician assisted by a dietitian. The diet may be prescribed by the doctor in terms of grams of protein, fat and carbohydrate. The dietitian, in turn, works this out in terms of measurements of food, that is to say, in cups or tablespoons, and it is her responsibility to make this clear to the patients. Because the patients are all living at home and are not bed cases in a hospital, the fulfillment of the diet prescribed will be, at best, only approximately accurate. The Massachusetts General Hospital in Boston has a diabetic clinic attended by over 200 patients and the department reports splendid success. At the dispensary of the Lakeside Hospital in Cleveland, there is a similar clinic composed largely of the ex-hospital cases who report regularly to the diabetic clinic for supervision.

Group Work Yields Good Results

Of utmost importance to a dietitian doing dispensary work is a demonstration room where she may give actual instruction in food preparation. With this equipment she will have no difficulty in holding the interest of groups throughout a definite course of lessons. Constipation and obesity cases can be grouped most effectively and excellent results obtained by this form of treatment. The patients grow to enjoy the sociability which the group affords and the element of competition stimulates an interest in adhering to the diet advised. While this group work does not entirely take the place of the work done in the homes of the patients, yet it enables the dietitian to reach many more people than she could otherwise instruct individually and in some cases is conducive to better results. The dietitian has an excellent opportunity in these group meetings to instill the gospel of good cheer and place the premium upon good health rather than on letting the "best fellow" be the one who has been through the greatest number of operations.

The nutrition work with the children occupies an important place in the dietetic department. Nearly every mother who brings her children to the clinic is in need of advice as to the best food for the family. At this time also the dietitian can advise the mother how to purchase her food so that she will be getting the best for her money. In addition to the individual interview, there will be a place for the nutrition class. It does not matter materially, which of the many means of teaching health to children is employed. The New York Nutrition Council has placed a wealth of material at our disposal through its recently published Nutritional Bibliography. One method which seems to merit attention is the use of cooking classes or the occasional serving of cooked food. In this way children may be taught to eat foods which they would never learn to eat in their own homes. Here again the spirit of competition is an important factor. A child will eat cereal because all the other children are eating it. It is decidedly "the thing to do," and he does it. Lack of home discipline is one of the greatest problems with which the nutrition worker has to deal. She must also recognize the bearing of social and economic factors upon the subject of malnutrition.

*From a paper read before the annual meeting of the Michigan Hospital Association, January 18, 1922.

In organizing a dietetic department of this kind the dietitian may expect to encounter difficulties. There may be, at first, indifference on the part of the physicians who have been working for years without such a department. In any case she will have to begin in a small way and prove her work to be of such value as to justify, not only its existence, but its growth to a large scale.

Fortunately the establishment of such a department does not call for expensive equipment. The demonstration room should contain only such things as are essential for the preparation of food. The use of elaborate utensils in the demonstration will not help to meet the needs of the patients when we remember their modest supply at home.

In conclusion, there are many dispensaries today in which nutrition and dietetic work is proving itself invaluable. Various descriptions of this work are printed from time to time in hospital and social service publications. The hospital which plans to develop such a department at this time may indeed profit by the pioneer work already accomplished by others.

PENNSYLVANIA HOSPITAL DIETITIANS HOLD ANNUAL MEETING

The Pennsylvania Hospital Dietitians Society recently held it first annual meeting in Philadelphia. The society includes in its membership all dietitians who have received a dietitian's certificate from that hospital since the inauguration of a postgraduate course of nine months in 1916.

Miss Helen E. Gilson, chief dietitian at Pennsylvania Hospital and honorary member of the organization, reported before the meeting some of the achievements of the department since 1916. The following data were included in the report:

Calls for dietitians	189
Positions filled by Pennsylvania Hospital dietitians	25
Positions filled by other hospital dietitians	29
Positions not filled	135

The organization at its recent meeting voted to start a loan fund to assist students who wished to take the postgraduate course but were financially handicapped.

Officers elected were the following: President, Miss Sara Clark, resident dietitian, Girard College, Philadelphia; vice-president, Miss Mary L. Rhoade, resident dietitian, Coatesville Hospital, Coatesville; treasurer, Miss Vera Kendrick, resident dietitian, Episcopal Hospital, Philadelphia; secretary, Miss Mary S. Haines, student dietitian, Pennsylvania Hospital, Philadelphia; fifth member executive committee, Miss Helen C. Chase, chief resident dietitian, Philadelphia Hospital for Mental Diseases.

Other members include: Miss E. Elizabeth Allis, secretary, department of physiology, Yale School of Medicine, New Haven, Conn.; Miss Martha P. Deal, student dietitian, Pennsylvania Hospital, Philadelphia, Pa.; Miss Margaret S. Duren, resident dietitian, Eastern Maine General Hospital, Bangor, Me.; Mrs. C. Z. Moyer, nee Miss Ruth E. Gilpin, formerly resident dietitian, Presbyterian Hospital, Philadelphia, Pa.; Miss Emily B. Hall, assistant dietitian, Western Pennsylvania Hospital, Fittsburgh; Mrs. Gwendolyn S. Hubbard, resident dietitian, Ellis College, Chestnut Hill, Pa.; Miss Gertrude B. Humphreys, assistant resident dietitian, Philadelphia Hospital for Mental Diseases, Byberry City Farms, Torresdale, Pa.; Miss Lillian R. Hunter and Miss Helen Shepardson, dietitians, Bide-a-Wee Tea Room & Gift Shop, Jenkintown, Pa.; Mrs. D. W. Holt, nee Miss Helen E. Knaur, formerly dietitian, St. Agnes Hospital, Philadelphia; Miss Frances Lothridge; Miss Ruth Pelton, student dietitian, Pennsylvania Hospital, Philadelphia; Miss Florence L. Shipee, resident dietitian, Presbyterian Hospital, Philadelphia; Miss Elizabeth Stillman, chief resident dietitian, Columbia Hospital, Wilkinsburg; Miss Beatrice R. Teasley, resident dietitian, Davis-Fisher Sanitarium, Atlanta, Ga.; Miss Muriel R. Warner, resident dietitian, Lancaster General Hospital, Lancaster; Miss Suzanne S. Wood, resident dietitian, The Holyoke City Hospital, Holyoke, Mass.

NEWS ITEMS

Miss Ruth Evelyn Jenkins entered upon her duties as administrative dietitian, University of Michigan Hospital, February 1.

The Herman Kiefer Hospital of Detroit has lost the services of Miss Lulu Sidwell who is now connected with Sparrow Hospital at Lansing, Mich.

Miss Mary Cunningham has accepted a position at Finley Hospital at Dubuque, Iowa. She was formerly connected with Hanover Hospital, Milwaukee.

A tea room in Rockford, Ill., known as The Tavern, has recently been established by Miss Leonore Hurst who has given up her work at Rockford Hospital.

Washington Boulevard Hospital in Chicago has Miss Mary Sedgwick as new dietitian, and the Illinois Central Hospital in the same city, Miss Katherine Haupt.

Student training under Miss Florence Smith at the Potter Metabolic Clinic is being taken by Miss Edna Klumb, formerly at Dr. Lynch's Hospital for Diabetes at West Baden, Ind.

Miss Eva Schairer has resigned her position at the University of Michigan Hospital, Ann Arbor, to accept a position as instructor in the University of Wisconsin. She began her duties the second semester.

On January 27 the Chicago Dietetic Association held its annual banquet at the Cordon Club, 410 S. Michigan Avenue. Mrs. George W. Plummer, state parliamentarian of the Illinois Federation of Women's Clubs, addressed the association.

Miss Cecil Johnson recently completed a course of student training at the Olmstead Hospital of the Mayo group, and has been appointed dietitian at the Colonial Hospital of the same group. Miss Foley has given Miss Katherine Ryan of Madison, Wis. the appointment for student training.

Miss Tashion of Brooklyn Methodist Hospital has given Miss Elizabeth Cooper the appointment as her assistant, and Miss Jeanne Griffith has returned to Syracuse Memorial Hospital as assistant dietitian. Both of these young women are Cornell graduates and have recently completed a course of student training at New York City Hospital. Miss Griffith was at the Syracuse Hospital during the summer of 1920.

The February meeting of the Allegheny County Dietetic Association was held at the Western Pennsylvania Hospital, Pittsburgh. Dr. Taylor gave a very interesting talk on vitamines at the conclusion of a short business meeting. The entire dietetic department was open for inspection and many of the visitors took advantage of this opportunity. Miss Kate Helzer, assisted by Miss Emily Hall, proved a charming hostess in the social hour that followed.

At the January meeting of the Chicago Dietetic Association, the annual election was held. The following officers were chosen: Miss Anna Boller, president and chairman of the infant welfare committee; Miss Breta Luther, Cook County Hospital, vice-president and chairman of the program committee; Miss Elizabeth Tufts, Wesley Memorial Hospital, secretary; Miss Clara Smith, assistant dietitian, Presbyterian Hospital, treasurer.

Other members of the executive committee are: Mrs. Esther Ackerson Fischer, chairman of membership, and Miss Rose Straka, chairman of publicity.

"The best popular test of ventilation, besides affecting everybody's senses, is the length of time which most houses retain the smell of dinner."—Florence Nightingale.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

HOSPITAL SIGNAL SYSTEMS

BY E. NEWTON-WELLS, SIGNAL ENGINEER, CHICAGO

ELECTRICALLY operated signal systems such as nurses' call, physicians' location systems, physicians' in-and-out registers and privately owned and operated telephones are now recognized as a necessity in the modern hospital. Such systems should be planned by a competent signal engineer or an architect, specializing in hospital work, since there is no set rule or stock plan which is applicable to all hospitals. Each hospital presents a different problem for the experienced engineer to solve, one requiring careful study and application to cope with existing conditions due to architectural design of the interior, number and location of corridors and chart rooms and division of supervision for both day and night service.

I will first take up nurses' call systems, and for the purpose of this article will divide hospitals into three classes: General, tuberculosis and neuropathic, each of which should be equipped with a system designed to meet its particular requirements. The hospital taking general cases should be equipped with what is known as a "regular" or straight system, with the exception of the major operating and delivery rooms, which should be equipped with emergency calling devices.

The tuberculosis sanatorium and the hospital devoted to the care of mental cases should be equipped with what is known as a duplex system, being a combination of the "regular" and emergency systems. In tuberculosis sanatoriums the emergency system is operated by the nurse to summon assistance in case of hemorrhages by pressing a special button located on the station plate. In neuropathic hospitals the emergency system is operated by the nurse to summon assistance if the patient becomes dangerously deranged or unmanageable, and is operated by inserting a circuit-closing attachment into the station plate. The emergency feature cannot be operated by the patient.

Signals Should Be Audible

In general hospitals the system should so operate that when a patient presses a button the action will light a white lamp directly over the door of the patient's room and a similar visual indication will be shown on the annunciator or pilot station in the chart room, diet kitchen, utility room, or junction of corridors, to give the nurse definite guidance to the patient's room. In major operating rooms and delivery rooms, where emergency equipment should be installed, the system operates as described above except pressure on the button causes red lamps to be lighted at the various points mentioned.

As a means for the patient to attract the attention of the nursing staff, an audible signal should be provided, since a nurse cannot be expected constantly to watch the visual signals. The audible signal is essential for night service when a minimum staff is on duty.

In "regular" systems this audible signal should be momentary and should be given on a mild toned buzzer, while in emergency systems it should consist of a mild toned bell so adjusted to the surrounding conditions that the volume of sound will be sufficient to attract the attention of the nurses and yet not disturb the patients.

The clearing out of calls should be done at the actual bedside of the patient and not at the annunciator, pilot or entrance to the patient's room. This insures the recording of the call until actually taken care of and prevents the neglect of patients.

System Should Be Simple

The system should be effective and simple in construction; complicated mechanism should be avoided. The average hospital engineer is rarely, if ever, familiar with highly technical and complicated electrical mechanism and cannot keep it in repair. It occasions the calling in of outside electrical men at considerable expense to the hospital and annoyance to the patients. In the patient's room no apparatus should be located that cannot be replaced, when out of order, by the nurse on duty. Apparatus should be interchangeable so that the nurse need not require the assistance of a mechanic or the use of tools.

It is also the writer's opinion, substantiated by a number of prominent medical men, that the only successful type of nurses' call system is the push button on the patient's bed. A call may then be accomplished without the slightest exertion on the part of the patient, whereas types of apparatus requiring the patient to reach for a button or pull a string necessitate more or less physical exertion. In some cases it is absolutely essential that the patient refrain from any such physical exertion; or it may be impossible for a patient to raise his arms.

Room and Floor Indicators

In a small three-story hospital of fifty beds, having one straight corridor on each floor, with an unobstructed view from end to end, a system consisting of patients' calling stations and corridor door lamps, with the chart room, diet kitchen and utility room, respectively, equipped

with pilot stations of the floor-indicating type so arranged that the signals from one floor will be repeated on the other floors, would be ideal for both day and night service.

Large hospitals, E, H, L, T or U shaped, require entirely different treatment, and should, in addition to the patients' calling stations and corridor door lamps, be equipped with direct room-indicating annunciators or direct indicating pilots to show the section or corridor from which the call originated. Local conditions may prove to be such that in addition to the above, master pilots located at corridor junctions may be necessary.

Tuberculosis sanatoriums should be equipped in such a manner that the patients' calling station and corridor door lamp are connected in multiple with similar equipment on the sun porches. Then when a patient is moved from the room to the sun porch the calling cord may be disconnected by the nurse from the room station plate and inserted in the porch station plate. With such an arrangement a nurse traversing either the interior corridor or the sun porch will receive a definite location from the patient's call.

Conflicting Signals

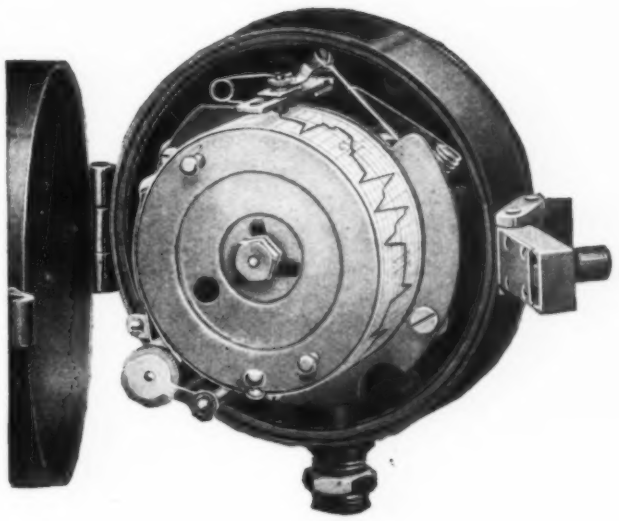
Confusion resulting from conflicting lamp signals or audible signals should be avoided. Lamp signals should never be mounted on the ceiling, as the lamps used in illuminating the corridors are apt to confuse the nurse; so located they are too high to be seen readily and to advantage. A lamp of low wattage enclosed under a small opaque glass cover of the dome type gives a softer and more evenly diffused light and consumes considerably less current than a larger lamp of the clear open type with its attendant glare.

The audible signal at the nurses' station should be given on a mild toned buzzer. Adjacent buzzers for other purposes result in untold confusion. Such signals as main entrance, ambulance entrance, local telephone and dumb waiter should also be given on bells of mild tone, but where more than one bell is located in the same section volume of sound, penetrating qualities and length of sound waves should be considered. Bells adapted to the peculiar uses should be selected, such as the wood, sleigh, tea or cow type gong, or standard gongs of suitable dimensions to give forth sufficient sound to attract the attention of the hospital staff and yet not annoy the patients. The material on which such equipment is to be mounted plays an important part in the results obtained; for instance, a mounting on a hollow wall partition causes the bell or buzzer to give forth a larger volume of sound, whereas a mounting on a dead wall has the opposite effect.

My next article will deal with physicians' location signals and registers.

A PRACTICAL INSTRUMENT FOR RECORDING AMBULANCE PERFORMANCE

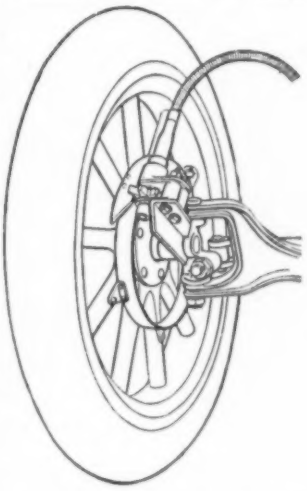
Many administrators have been searching for an instrument that would serve as a definite check upon the performance of their ambulances and trucks. Such an instrument is now on the market and has proved its value in a number of instances. Together with the "ambulance call" slip which should show time of receipt of call, time ambulance left its station and time of arrival at hospital with patient, this instrument permits of an absolute check of the service. The illustrations shown



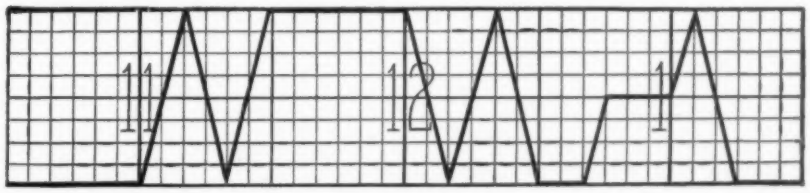
portray the mechanism of the instrument and the record it makes.

Speeding, joy-riding, unnecessary delays, excuses for neglecting minor repairs, and numerous other complaints that come to the superintendent's desk, because of improper chauffeur service, can be controlled.

The recordograph is a practical instrument, simple, accurate and tamperproof; the record it writes of each movement or stop permits of a detailed analysis of the operation of ambulance or truck, including mileage, running time, speed and stops. Increased efficiency has followed in instances where it has been installed.



The instrument consists of three main parts, the clock, recording device and pencil mechanism. The recording mechanism is a flexible worm shaft, driving a worm wheel, which in turn rotates an eccentric cam. A tape is threaded into the clock drum and the pencil which is actuated by the eccentric cam produces a clear and concise record on the tape. This record can be analyzed (at the hospital or through the service bureau maintained by the manufacturer) to furnish extensive data that will serve as a means of curbing waste and increasing efficiency. Each tape is thirty-six hours long, divided into hourly periods, which are further subdivided into five minute periods. A horizontal line on the tape indicates the length of stop. When the ambulance moves, an oblique line is traced by the pencil. Horizontal lines, divide the tape into squares, each square representing one-quarter mile. A complete oblique line across the tape represents a movement of two miles and the angle of obliquity represents the rate



of speed. A scale for interpretation is furnished with each instrument.

In several instances where the equipment is in use, it has been dubbed "the man in the box" by the chauffeur and has substantiated the manufacturers' claims.

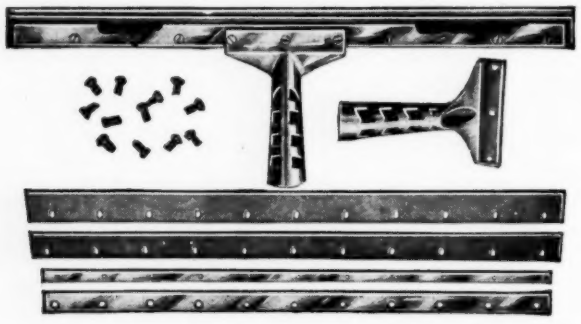
A SIMPLE FIRE EXTINGUISHER

A number of hospitals are now employing a new type of fire extinguisher that is apparently well adapted to institution use. The extinguisher in appearance is very similar to the small automatics widely used. It is of the soda and acid type and is extremely easy and inexpensive to recharge. The liquid discharged from it is absolutely harmless to all fabrics and woodwork as well as to the operator.

The method of operation should appeal to every one who has had experience with the ordinary type of small extinguisher. In order to discharge the extinguisher, all that is necessary is to hit the plunger a sharp blow on the floor. This drives the plunger into the lead capsule and opens the extinguisher which then throws a continuous stream. The method is far more sure than the hand operated valve or pump type extinguisher, which is liable to corrode and thus fail to operate when an emergency arises.

SQUEEGEE CAN BE RENEWED

The idea that window cleaners can be renewed is by no means of recent origin. A new window cleaner, however, has just been placed on the market which offers a number of points of apparent superiority. The illustration



shows the outfit both assembled and taken apart. The handle and upper bar are of aluminum; the lower part is of brass with two strips of heavy red gum rubber instead of the customary single strip. Only brass screws are used and these are threaded into a brass plate; this prevents the threads from becoming worn or the screws becoming rusted, the two greatest drawbacks to renewable cleaners in the past. When the rubber strip becomes worn, it requires but a moment's time to replace it and the cleaner is again as good as new.

A NEW RENEWABLE FUSE PLUG

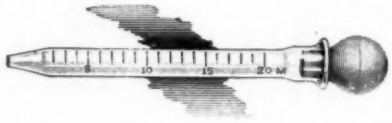
While renewable fuses are by no means new, there has recently been introduced a new fuse which should appeal to hospital executives. Not only is the new fuse said to be absolutely safe, but it can be renewed with ease and rapidity. The illustration shows the three parts of the new fuse plug, consisting of the body, cap and refill. The cap and body are made of heat-resisting molded insulation and are unusually strong so that there is little likelihood of damage either from dropping or from the repeated blowing of the fuse element.

The refill is an ingenious little cartridge properly vented for the ignition of the gases formed when the element vaporizes. The rating of this element is stamped on both ends of the cartridge so that it is always visible through the aperture in the cap regardless of how the refill is inserted in the body. The cost of this refill, it is said, is only that of a postage stamp. When a fuse happens to burn out, all that it is necessary to do is to unscrew the cap from the body and drop in a new cartridge. The entire operation requires but a moment and is accompanied by no danger of shock such as often threatens when fuses are hurriedly replaced.

Any rating can be secured from three to thirty amperes, and the exact rating is visible at all times. This enables each circuit to be properly fused to meet existing requirements. Circuits having heating pads and other electrical appliances naturally require a higher current than the ordinary lighting circuit. With the new renewable fuse, dangers of over-fusing and under-fusing both are eliminated.

FOR MEASURING MINIM DOSES

The accurate administration of minim doses of drugs or medicines is a vexing problem in the hospital. At present dependence is generally placed on the drop to measure volumes less than a dram, notwithstanding the fact that this is an uncertain and an unreliable method. As is well known, the drop varies in size, not only according to the nature



of the liquid and the surface from which it falls, but also with temperature, rapidity of dropping and other factors.

To overcome this problem there has been recently devised a dropper so graduated that a dose may be measured accurately from one to twenty minims.

While this new dropper or pipette will be generally used, its value in pediatrics will be particularly great, as the ability to measure small doses accurately is of great importance, on account of the greater delicacy of young patients and also because of the care necessary to avoid gastro-intestinal disturbances which frequently follow the giving of large amounts of syrupy and strongly alcoholic vehicles.

"It was the primal struggle between the leader and the follower, between the representative and the represented. And it is a never-ending conflict. When the leader gains a small advantage, the pendulum of civilization swings toward aristocracy and when the follower, beginning to think, beginning to struggle, gains a small advantage, then the pendulum inclines toward democracy."—Grayson.

AN IMPROVED COFFEE MAKING PROCESS

Uniformly good coffee is extremely difficult to prepare, not only in hospitals but in any place where the beverage is served in quantity. Difficulties in maintaining the coffee quality can almost invariably be traced to carelessness in its production due to improper care of the urns, temperature of the water used in making, temperature at which the coffee is served, protracted leaching, or the use of old coffee mixed with new.

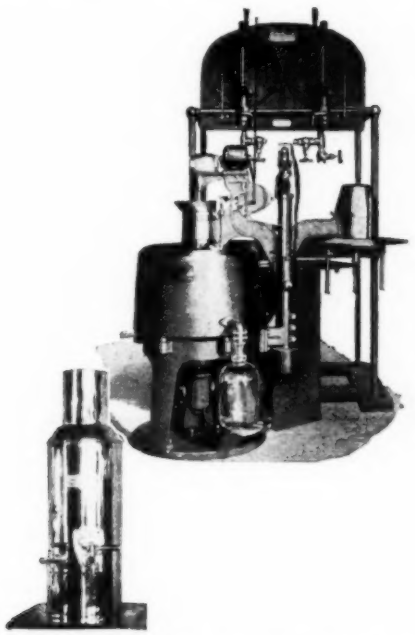
A new process in coffee making has recently been perfected which offers many advantages to institutions dispensing 500 or more cups a day. Those responsible for this new device have apparently made an exhaustive study of the chemistry of coffee and have based their process upon the results of these investigations.

The characteristic smell and taste of coffee, technically known as the aroma and flavor, are derived exclusively from the volatile oils extracted from the coffee bean. With the exception of a slight bitterness and acridity, caffeine, the active principle of coffee, is almost tasteless. Most of the bitter taste usually encountered in coffee, which commonly arises from protracted boiling or leaching, is due mainly to the tannates and resins in the coffee, both of which have injurious effects upon the human system.

Has Infuser and Dispenser

The new process includes two devices, one for infusing and the other for dispensing coffee beverage.

The coffee infuser extracts the volatile oils, i. e., the



The upper portion of the illustration shows the two units of the coffee infuser, consisting of the infuser proper, or extractor, and the accompanying hot water unit equipped with thermostatic control. The smaller illustration in the lower left hand corner shows the coffee dispenser required by this process

desirable element, from the coffee bean and leaves the deleterious ones behind. The infuser is about the size and appearance of the ordinary centrifugal machine such as is used for the drying of clothes in laundries. It is in fact a centrifugal machine, the principal part of which is a revolving basket. This basket is the retaining wall for a cylinder of pulverized coffee through which a volume of boiling water is forced in something less than 38 seconds. The process is so complete that the discarded coffee grounds are without coffee flavor or aroma.

With each operation of the infuser a gallon of liquid coffee known as "coffee base" is obtained, which will serve upwards of 128 cups of strong coffee. The "coffee base" thus produced does not need to be immediately used, but can be transported to various parts of the institution and utilized as needed during the day. This permits the making of all coffee in a central kitchen.

A special dispenser is essential for the proper serving of the "coffee base." This dispenser has much the appearance of the common type of coffee urn, upon which open bottles of "coffee base" are inverted in the same manner that water bottles are placed on water dispensers. The coffee dispenser is of clever design and provides means for automatically combining the "coffee base" with hot water in predetermined proportions so that it is possible to serve the coffee at any desired strength. When the proportions of water are determined each cup of coffee served will be of identical strength. Furthermore, a special mixing faucet is provided which locks thermostatically unless the service water is at or above a given temperature. This insures the serving of coffee "piping hot" at all times.

Economy Is Claimed

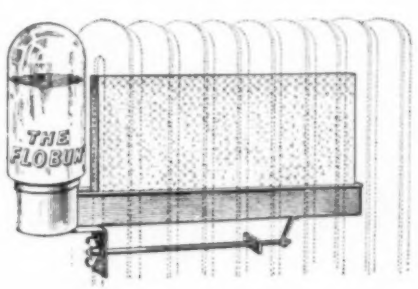
Many economies are claimed through the use of the infusion method in the hospital. Operation of the machine requires no skilled attention, it being virtually automatic. Claim is made that the process allows a conspicuous saving in the sugar and cream bill. The major part of the natural sugar always present in good green coffee is extracted from the bean by the infuser, and the coffee is, consequently, slightly sweet. Cream is used in ordinary coffee to cover up the more or less bitter taste frequently present. As a result less cream and less sugar are said to be desired in coffee made by the infusion process. Another distinct advantage claimed for the infusion method in institution use is the fact that it is possible to supply coffee of varying strength to meet possible clinical requirements.

The manufacturers also cite numerous cases of individuals, who unable to drink coffee made by the common method, have experienced no discomfort from its use when prepared by the infusion process.

A NEW HUMIDIFIER

The importance of maintaining a proper degree of humidity in hospitals and public buildings is recognized alike by hospital executives and sanitarians.

This is particularly a problem of the winter months when windows are closed and when the heating plant dries



the air. In many hospitals the humidity falls as low as three per cent and unless artificial means are used for increasing the natural humidity, it rarely rises above twenty per cent.

A new device, which supplies the necessary moisture for maintaining the proper degree of humidity in the room, has been recently introduced for attachment to standard types of radiators. The outfit in brief consists of an absorbent pad inserted between the columns of the radiator, the bottom edge of the pad resting in a runway or trough, which in turn is connected to a glass water container projecting at the side of the radiator. Capillary attraction draws the water from the trough into the pad where the large exposed surface insures rapid evaporation.

With this outfit it is claimed that a relative humidity of fifty per cent can be maintained with no cost of maintenance except the replenishment of the water supply. It is said that the new humidifier when attached to the ordinary steam radiator at a normal temperature will evaporate a gallon of water a day, giving evidence of the practical value of the device.

The outfit is attractively finished and does not detract from the appearance of the radiator.

AN IMPROVED WASTE RECEPTACLE

Of the many types of waste receptacles offered for hospital use those with a cover which can be automatically raised by means of a foot pedal are preferable. A new type of such waste receptacle, which includes a number of interesting features, has recently been introduced on the hospital market.

The outfit itself is substantially constructed. The pail, cover and frame are of heavy steel, finished in white enamel; working parts are made of brass, nickel plated. As will be seen from the illustration, the cover is not hinged to the pail as is ordinarily the case in similar outfits. This fact permits the pail to be removed from the base without the cover, simply by pressing the foot pedal and thus raising the cover. The cover is attached to the lifting device by a thumb screw and if it is desired to remove the pail with the cover on, it can be readily detached.

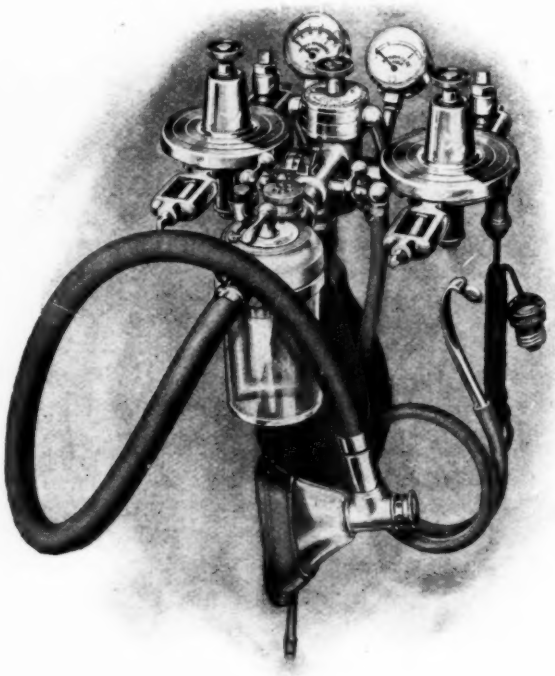
Probably the most interesting feature of this new outfit is a disinfecting and deodorizing device incorporated in the cover. The device consists of a small chamber in which cotton or other absorbent material may be placed after it has been saturated in any standard disinfectant or deodorant. While this method of disinfection is probably not entirely reliable, yet it is undoubtedly of some value—particularly in neutralizing objectionable waste odors.

In many hospitals a waste receptacle of this kind is used not only in operating and dressing rooms but also in main and service kitchens as a garbage container.

AN IMPROVED AUTOMATIC ANESTHETIZER

One of the well known manufacturers of anesthetizing equipment has recently introduced a new unit offering many interesting features.

This unit provides for administering anesthetic combinations as follows: nitrous oxid-oxygen, nitrous oxid-oxygen-ether, oxygen-air-ether, oxygen-ether, air-ether, ether.



Switches from one method to another are made with ease and with no disturbance to patient, surgeon or anesthetist. So smoothly are the various sequences entered that none but the anesthetist, it is said, is aware of the change.

The apparatus illustrated herewith has incorporated in its center head casting the bag shut-off valve, which for other models is a separate accessory. In the improved construction the sliding cam which opens and closes off the bag may be operated manually or automatically by the emergency oxygen stopcock.

The outfit also is equipped with direct nitrous oxid connection for supplying an unlimited volume of nitrous oxid. Automatic shut-offs are incorporated in the cylinder yokes.

A most distinctive advance in surgical gas apparatus construction from the standpoint of safety, however, is the positive pressure regulating valve which measures and indicates the maximum pressure being exerted on the lung of the patient and furnishes an automatic spillway. Adjusted at from five to five hundred MmHg pressure it becomes an indispensable element of safety in anesthesia for major surgery when both nose and mouth are covered by the inhaler.

NEW POLYCLINIC IN CHILE

The Ligade Higiene Social of Santiago, Chile, has begun the construction of a large polyclinic. The placing of the cornerstone became a public celebration, being attended by the president of the republic and the diplomatic corps.

OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by HERBERT J. HALL, M.D., President, American Occupational Therapy Association, Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS, Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
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REHABILITATION OF DISABLED MEN IN RELATION TO THE FAMILY

BY ELLEN G. HOFFMAN, WASHINGTON, D. C.

THE family group constitute one of the foundations upon which rests our highest culture, and it would seem that upon its well-being finally depends in large measure the strength and wholesomeness of every government. From the viewpoint of public welfare, which is considered the proper viewpoint, the reeducation of a disabled man cannot be successfully carried out unless linked with the interests of his family. The broken motor of a car after being thoroughly repaired is still of very limited use without frame, body, and wheels. So with the broken man, the most complete rehabilitation cannot usually be reached unless his interests are considered in connection with those of his family.

HELP OR HINDRANCE?

When another factor, in the person of the disabled man's family, is introduced into his problem it of course becomes more complex. The social worker must be the one to deal with this new factor, the methods varying according to the circumstances or the attitude of the family.

The family may give help of a high character, but this is unfortunately rare. More often the family adds to the disabled one's burden by helping to develop in him an attitude of self pity. Or they may pour out their financial and other worries which for the very reason that he is helpless to change them worry him most of all. It is for the social worker to help solve the difficulties and to enlist the determined cooperation of the family in carrying out a program of rehabilitation.

Family Often Complicates Problem

As the number of problems in any enterprise depends largely upon the diversity of interests involved, so the work of reconstruction of the disabled man is apt to become more intricate when the interests of his family are considered, though this is not always the case. Some of the difficulties that arise are easy of solution, but others are extremely hard and require upon the part of the social service worker a broad sympathy, a real knowledge of human nature, and an abundance of tact and common sense. The methods to be employed vary with each set of circumstances and with the temperament of each individual with whom the worker has to deal. Probably the greatest need of the disabled citizen is not a fine course of study, or a wonderful school equipment or a splendid building, but a wise guidance by one fitted for the task.

The Israelites in Egypt could not make bricks without straw. Neither can the maimed man be rehabilitated unless he has within him some of the elements of self-help. But that is not enough; he must have outside assistance as well. And fortunate indeed is he who has in his family some one who really understands his needs and knows how effectively to minister unto them. However, such family help of a high character is quite rare, and the guidance of the trained worker in the reconstruction field becomes a necessity in most cases, not only for the man but for his family as well.

Any discussion of the subject at hand should include a mention at least of the young man who, though without any kind of a family at present, is nevertheless the potential head of one that may be found in the future. He is frequently without opportunity to come in proper contact with suitable members of the opposite sex, when helpful associations of that nature would form the biggest single element in his return to useful citizenship.

Henry Todd was twenty-one, unmarried, and without a family or close friends. He was keenly interested in outdoor sports, had been an ardent dancer, and had planned a business requiring the active use of two stout legs. An amputation at the left knee threw him into the depths of despair, from which he stubbornly refused to rise. He felt that he could never marry, and that he was on the scrap heap, and he talked frequently of suicide. Through the wise ministration of a social service worker, he was cheered out of his despondency, was induced to take a course in telegraphy and was interested in social activities. The latter brought the acquaintance of a capable young lady of his class who encouraged him further and whom he finally married. The result is a happy and prosperous home.

Carry Message of Good Cheer

The first message to carry to the disabled man is the message of good cheer. No matter how optimistic his nature may be, he cannot at all times keep in buoyant spirits, and if he is inclined to be pessimistic, he will envelop himself in gloom. A hope, founded on good rea-

sons, is the best tonic he can be given. All too frequently, his family will unintentionally drive him to a deeper quagmire of despair rather than pull him out.

A soldier who had been gassed, developed tuberculosis. He also had been operated upon for a serious wound. He had a wife and infant child, and the family possessed very scanty means. The wife visited the husband daily in the hospital and thoughtlessly poured into his ears a stream of lamentations. The patient seemed to have lost all hope and grew steadily worse. A social service worker took the matter up with his wife and in a heart-to-heart talk convinced her that she was exerting a detrimental influence upon her husband. Part-time employment was secured for her which somewhat relieved the family financial difficulties. She completely reversed her attitude toward her husband while in his presence, to his great pleasure and benefit. He recovered sufficiently to leave the hospital and through the efforts of the social service worker secured a job as chauffeur in Colorado, where he is now enjoying reasonably good health and is supporting himself and family in comfort.

Must Not Develop Self-Pity

The development by family and friends of a feeling of self-pity in the mind of a disabled man presents a common problem in reconstruction work. Such an acquisition is a constant burden upon the injured man, always retarding and sometimes destroying his chances of rehabilitation. The duty devolves upon the social service worker to change, if possible, the conditions which produce such results.

A devoted, but somewhat impractical, widowed mother was the daily companion of her only son, who had lost his right hand and a foot. She was in good financial circumstances, but the injuries to the boy demanded a change in a program for him. She looked upon her son's condition as wholly irremediable. She constantly carried this feeling to the young man by suggestion. Her most frequent salutation to him was, "You poor boy!" She emphasized the importance of the fact that she had enough money to care for him always in his dependency. She wept at the fumbling efforts of his left hand. As a matter of fact, having youth, good health and financial independence, the young man had much to be thankful for, but he was devoted to his mother and she developed in him such a feeling of self-pity that he made very poor progress. It was not feasible to keep the son and mother apart. The mother was importuned to change her attitude, but without avail at first. The family physician was called in to plead with her, and then her pastor. She made promises but seemed unable to keep them when in the presence of her son. Finally the social service worker in charge of the case devised the plan of meeting the mother each day just in advance of her visit to her son, and fortifying her with a carefully prepared program of what to say and do while with the boy. Strange to say this rather artificial scheme worked out well in actual practice.

THE SEWING LADY

"Occupational therapy aide" is a formidable name, quite beyond the powers of comprehension of the average hospital patient. Many are the amusing designations which have been applied to the busy young women who bring work and cheer to the bedside. "Sewing Lady" is not bad. One of our aides commonly goes under this name. This particular aide was surprised to have a new patient burst into tears and hide her face in her hands when approached in the usual cheery manner. A little tactful inquiring disclosed the reason. The patient thought that the "Sewing Lady" was about to take out the stitches in the laparotomy wound.

Discouragement and discontent and a consequent slow recovery on the part of the disabled man do not always arise on account of his own condition but frequently come from worry over the problems which confront his family. The social service worker must relieve his mind in these matters, and to do so, must attempt the solution of the family troubles. Financial difficulties and ill health are the most common of these. An employment service to relieve the first trouble has in some cases accomplished wonders. Sometimes the securing of temporary loans is necessary, and again the public poor fund or some other charity must be called upon. The matter of the family health may be attended to through personal ministrations of the worker and the public health authorities and philanthropic societies. In this way assurances may be given the disabled man that his family is not in danger of suffering.

A Victim of Circumstances

Sometimes these family troubles appear upon the criminal dockets of the courts. Patrick and Timothy Murphy were orphans, brothers and pals. Pat was nineteen and Tim was twenty-three, and the latter, in addition to being a pal, was also a father to the former. Tim was in the thick of the fight in France, while Pat was left behind without the beneficent guidance of his older brother. Later Tim's crippled body was brought to Walter Reed Hospital in Washington about the time that Pat, charged with a felony, was incarcerated in Cook County jail in Chicago. A letter from the younger boy, telling the story of his trouble, reached his brother. The latter was very seriously wounded, but the tribulations of his "Little Pat" gave him much more concern than his own bodily ailments. A social service bureau in Chicago was asked to investigate Pat's case. It was found that he was largely a victim of circumstances, bail was secured for him and later a parole. He went to Washington, secured a job and not only greatly aided in his brother's rehabilitation, but did a large amount of volunteer reconstruction work for others.

Families Often Asset in the Work

It should not be assumed, however, that in the work of re-educating disabled men, the members of their families are always liabilities. On the contrary, probably a majority may be made genuine assets in the work. When through interest in a crippled husband, brother or son, there comes to an individual an understanding of the real meaning of the rehabilitation program, such a person frequently becomes an enthusiastic and permanent volunteer in social service labor. It is from this angle that some of the most desirable results may be obtained. It is therefore of special importance for the social service worker to impress upon the families of men being re-educated, the significance of the work in its broadest sense, and apart from its application to a single individual.

A sister, whose brother was being treated at Lakewood,

N. J., was a social butterfly. She was financially independent and led a useless, namby-pamby existence. Her mental endowment was good, however, and without particular guidance she was able to and did render a fine service to her brother. The worker in charge thought she saw an opportunity to secure a useful helper, and tactfully impressed upon the sister the great importance of reconstruction work. The result was that the latter, becoming enthusiastic, dropped almost entirely her old social activities, and is now devoting her time, money and energy to intelligent and effective rehabilitation service.

The education of a collegian is not completed with his commencement exercises. Neither is the work of rehabilitating a disabled man finished when he leaves the hospital or the school. Nor is the association of the social service worker with the man or his family terminated at that time. The cripple still needs proper support, and much of this must come through the worker in cooperation with the disabled man's family. For lack of that support, he may have to return to the hospital or the school, discouraged at the reverse, thus retarding his final recovery. Above all things the atmosphere of the home must be made sensible and helpful. Wrong attitudes in hospital and school are likewise wrong attitudes in the home to which the disabled man returns. Sanitation, health, food, medicine, employment, all these must be considered in a spirit of sympathetic and cheerful helpfulness, but without maudlin sentimentality.

It is important that the reconstructed man's employment be secured and held upon the basis of merit, rather than upon that of charity. The man himself must be made to realize that he is a real factor in his country's life, that his services have an actual value, and that he is not a dependent upon public bounty. This should be the attitude of the employer and the public. Education is necessary to bring this result, and the family, through wise direction, may be made a big factor in developing in a community such a viewpoint.

"In union there is strength," and through the intelligent cooperation of families of disabled men much good may come. The direction of such cooperation furnishes a broad field for the activities of the social service worker. The fine spirit that may be thus developed often comes as a most pleasing surprise. It is of the same character as that of the Pilgrims on New England's rock-bound coast, or of the early pioneers in the West. With common experiences, common hardships, and common problems, the commonplaces of life take on new values to these people. Narrow selfishness is succeeded by a happy spirit of mutual help. In the organization of their combined activities greater efficiency is of course obtained. This means more successful efforts along all lines and consequently fewer failures. The morale of the family is improved, and this healing influence is necessarily extended to the disabled man either in or out of the school or hospital.

And so it would appear that the salvage of the man from the wreckage of war and industry is peculiarly a family problem. The interests of the disabled cannot be separated from those of the family. The development, the welfare of the family as a whole, is a cause worthy the earnest thought of every patriotic citizen.

"A half-educated man knows enough to criticize and abandon the customs of his fathers, but not enough to preserve their merits or to improve their defective parts."
—Thorndike.

WHAT DAVID BELASCO SAID

David Belasco at a recent dinner in New York in celebration of his fortieth year as play producer made the following remark: "I believe that God meant us to work. I believe He meant us to earn our living by the sweat of our brows. But I believe He meant us to love our work so much that we might play at it, find real and profound pleasure in it and so labor on. . . . The curse of our times is the vast army of people who care nothing for their work, who labor solely for money."

There is an immense amount of wisdom packed into these few words. Perhaps a great deal of our social and industrial unrest would be cured if by some miracle the love of work could become the rule rather than the exception.

Those who have studied the industrial situation keenly and with an appreciation of the human elements involved are inclined to believe that automatic machinery, valuable, indispensable as it is, has not been an unmitigated blessing. Throughout the field of manual labor, the machine has been slowly but surely leveling the worker to a plane where thinking, where pleasure in production is largely lost. The men who invent and build the machines doubtless have a very good time doing it, but they are few. The machine work is now so subdivided that thousands and thousands of workers go through a few unvarying motions day after day, year after year. The efficiency experts, who probably love their work, study photographically and otherwise those few human motions, and simplify them until individuality is as far as possible eliminated, and the workers become themselves machines automatically feeding other machines. It is hard to imagine much joy in such a life even if the pay is adequate and the hours are short.

Perhaps some men come to love the machine that punches holes in an iron plate seven hours a day, diversifying the process once in a great while by punching holes in the hand of the operator. Possibly there are large classes of men who would be capable of no broad horizon and who are well enough off as they are. Doubtless the machine has come to stay, and we may as well make the best of it, which may not be so bad after all since it makes available so many luxuries and necessities.

But it can be said without much fear of contradiction that unless the factory worker finds some real diversion, some great interest outside his work, we are likely in time to suffer pretty devasting social and industrial effects from the distaste for work which seems to be growing rather than diminishing.

Competent observers think that the working men and women literally do not, as a class, know what to do with the opportunities that daylight saving and shortened working hours have afforded. There are the movies, of course, playgrounds and museums, church and home interests, but on the whole the prospect is pretty bleak for the man who is earning only just enough to live on. Even the solace of the saloon is now removed, with benefit no doubt, but as yet there seems little enough to take its place.

What has this recital of well known facts to do with occupational therapy? Just this, that when accident or disease sends the factory hand to bed in a hospital, there is a chance, a slim one, perhaps, but a chance that he may have a taste of really interesting work for pleasure and profit, that he may learn what it is to make play of work, that he may acquire a hobby. The bedside crafts may help him to revert in mind, at least, to the good old times when peasant crafts were so satisfactory a part of daily life. If the making of wooden toys in the hospital

helps him to get well, clears his eye and strengthens his hand, the wholesome human interest of the thing may decide him to keep on making toys for his children or his neighbors' children in the spare hours at home after his recovery. Would such an experience make him more dissatisfied with his little detailed part of the great factory system? I hardly think so. The occupational aide, if she has vision, may even help her patient to see the advantage of becoming interested in the end product of the factory, may even teach him a new pride in his small but indispensable part of the great whole. A dream, a fancy? Well, perhaps, but suggestion and the kindling of imagination are not small forces in this world of grim realities.

What if through the thoroughgoing application of curative craftswork in the hospitals we should popularize again some of the old folkcrafts to fill in the winter evenings at home? What if we should succeed in giving a whole army of cripples a partial livelihood? Perhaps there is more to occupational therapy than we have yet dreamed of.

Every O. T. worker of experience has seen hard, rebellious men and women soften and become teachable under the influence of quiet work, of work which does not crunch and tear with the ferocity of the power driven machine, but which may carry over into the machine life a new sense of humanity, a growing love of creative accomplishment. Not once in a thousand times would such a thing happen, but that once is worth while, and who shall say how far the influence might reach!

In helping the handicapped to use again their broken faculties, we can hardly be said to be making much headway against the great unrest, but it is something if here and there we can give a man pleasure in work, though that work may be in itself of the very slightest consequence.

COMMERCIALISM

Should occupational therapy be concerned with the commercial value of its products?

Aides, directors and interested medical men are invited to write to the editors expressing their opinions on this important question. In a recent communication received by the department the expression, "the fallacy of putting occupational therapy on a commercial basis" was used. If there were no differences of opinion, occupational therapy would be far less alive and stimulating.

Some of the leaders in O. T. have always stood out frankly and firmly for a modified commercialism. "The more valuable the product, the better the therapeutic effect" has been one of their articles by faith. Like most catch phrases, it expresses only a partial truth. Probably no experienced O. T. worker is so far gone in commercialism as to assume that a poor piece of work may not represent a veritable triumph for aide and patient, even though the money value is nil. But is it not up to the occupational directors to put enough thought and skill into the preparation of their problems, so that a valueless product will be the rare exception? Is it not true that given the right materials and a proper supervision, the therapeutic work of the handicapped may almost always be good enough to command a legitimate market? May it not be that a really valueless product reflects upon the skill of the aide rather than upon the patient?

Occupational therapy may easily lose its identity and become an economic or commercial proposition, if we make good work the chief concern. The first insistence must be that the patient shall benefit physically and mentally by his work. Our efforts in O. T. would be wholly justified if no product of commercial value ever resulted from the labors of our patients, but if we can add the encouragement, the delight of a small money return, shall we not be wholly justified? Can we afford to ignore human nature that wants something tangible, more tangible even than returning efficiency as a reward for labor accomplished? Is not the laborer "worthy of his hire" even if he happens to be an invalid? We have, no doubt, a right to spoil an unlimited quantity of good material if by doing so we may even in the slightest degree improve the courage and effectiveness of our patients. But have we a moral right to spoil that good material if, by a little more thought and skill on our part as teachers, we may see it converted into a legitimately salable product for the benefit of the patient and for the support of the system?

These are interesting and important questions. Serve the good cause by reporting instances where the commercial spirit has interfered with the best therapeutic results. Report to us, also, cases in which the money value of O. T. products has actually helped the patient to make progress toward recovery.

MASSACHUSETTS STATISTICS

A recent bulletin of the Massachusetts Society for Mental Hygiene makes the startling statement that "one out of ten of all adults in Massachusetts will either die in state institutions for the mentally sick or be admitted or discharged from such an institution before he dies." It further states that "on November 1, 1921, there were, under care in state hospitals for the insane and feebleminded, nearly 19,377 patients and that for the fiscal year insanity, feeble-mindedness and mental disorder took toll of $7,000,000 of taxpayers' money, nearly one-fifth of the state expenditure ($7,187,022.22.)"

"There is one mentally sick person under institutional care for every 248 of the estimated population of Massachusetts," continues the report. "There are in America as many mentally sick patients under institutional care as there are patients in all other hospitals (medical, surgical, etc.) put together."

In terms of occupational therapy and of directed household, farm and shop activities, it would seem that there is plenty of work ahead, for we may now say without fear of contradiction that nearly every one of these mentally sick patients needs to have his activities skillfully directed, if he is not to be left to degenerate through unnecessary idleness.

NEW YORK NURSES PLAN WESTERN TOUR

The New York State Nurses' Association has arranged a thirty-day tour in connection with the convention of the American Nurses' Association in Seattle, June 26. An entire train with two diners and a baggage car will take the New York nurses and others who care to join them over a detailed itinerary covering points of interest at Banff, Lake Louise, Seattle, Portland, San Francisco, Los Angeles, Yosemite Valley, Yellowstone Park, Salt Lake City, Colorado Springs, Pike's Peak and Denver. The expenses of the trip will be covered at one flat rate so that the nurses can figure before they leave the exact cost of the journey from New York until their return, including hotel accommodations, meals, fares, special trips, etc. Mrs. Julia Kline, 546 Rugby Road, Brooklyn, is chairman of the transportation of the New York association and she will furnish full particulars concerning the trip to any nurses interested.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association 370 Seventh Avenue, New York

MANAGEMENT OF A VENEREAL DISEASE CLINIC

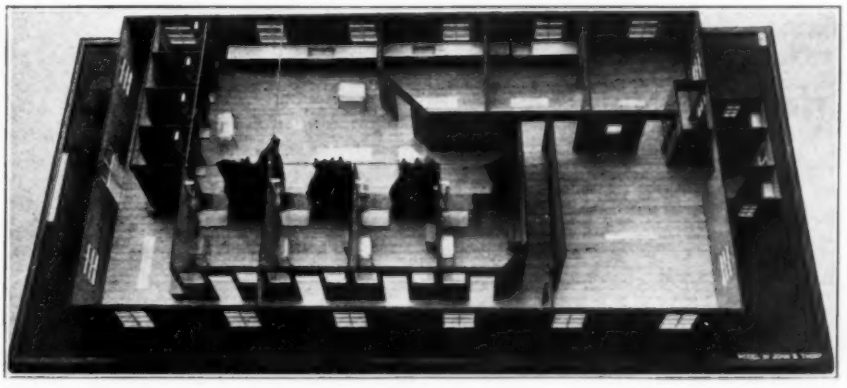
BY ALEC N. THOMSON, M. D., DIRECTOR OF MEDICAL SERVICES, AMERICAN SOCIAL HYGIENE ASSOCIATION, NEW YORK.

IN A recent survey of a city of 800,000 population it was estimated that 35,000 require treatment for gonorrhea and syphilis each year, or 4 per cent of the population. If we assume that 25 per cent of this number is unable to pay a private physician's fees, we arrive at the conclusion that 1 per cent of the population needs clinical facilities. This seems to indicate that in cities of less than 50,000 population it is difficult to manage a clinic efficiently and economically, and that in cities of less than 200,000 population such an undertaking would be unwise except in combination with other community health work.

Having determined the ability to support a clinic, the next important step is the location of the clinic. The location is important because of its affect upon attendance, upon class of service and upon economic operation. To draw the largest number, a clinic should be centrally located in order to be equally accessible to all who desire its services. A venereal disease clinic might be located in an office building; might be an isolated out-patient activity of a hospital or dispensary; might be one of the the medical activities of a health center. But to meet all conditions ideally it should be one of the clinics of a general dispensary, centrally located if possible. In this type of clinic the cause for the patient's attendance is least obvious to the public; costs are reduced to a minimum because some of the overhead is shared by other departments and purchases can be made in greater quantity; consultation, morale, interest and coöperation in the work are at their best. The other locations, from the health center to the office building, have some of these advantages in respectively less degree, leaving the office building or isolated clinic the least desirable and advantageous.

General Dispensary Waiting Room Best

The amount of space required for the efficient organization of a clinic depends mainly upon the volume of work to be done and the personnel to be accommodated. Other factors may enter into the consideration of the total floor space and its subdivision according to the location of the clinic; such, for instance, as space for social worker and clerical staff, or space for waiting room, which might be part of the general administrative arrangement of a dispensary. On the whole, however, consideration should be given to space for waiting room, history room, examination room and treatment room.



A plan of a venereal disease clinic that can readily be adapted to existing buildings.

The waiting room is, of course, best taken care of in the waiting space of the general dispensary in which the patient is not classified according to his disease. Where this is not possible and a separate waiting room is necessary, this space need not be large. The number of waiting patients should never show much accumulation if the clinic is efficiently managed. This means prompt attendance at clinic and steady and devoted application to the work on the part of the personnel.

In a small clinic the history taking and examining may be combined in one room, as comparatively few new

patients are admitted in any one clinic session. Patients disrobe for a full physical examination. In a larger clinic, therefore, it is necessary to have a separate history room and examining room in order to maintain privacy and quiet.

The space required in the treatment room depends upon the number of patients to be taken care of and the time allowed for technical procedures. Many clinics attempt to run a large number of patients during a short period of time in improperly arranged quarters.

In planning equipment, economy of space and convenience of the personnel should be considered. Space can often be saved by careful placement of apparatus and avoidance of duplication. Every room does not necessarily have to have a sterilizer, although the procedures carried out in the room may require the occasional use of one. The equipment for irrigation work in the treatment of gonorrhea in the male may, for instance, be such as to do away with the ordinary lavatory for washing up at a considerable saving of space and money.

The accompanying cut of floor plan is illustrative of simple arrangements of minimum space for minimum personnel, conducive to fluidity of traffic and maximum efficiency. Under such conditions it should be possible to handle an average of nine patients per hour per unit of personnel. The advantages of both of these floor plans is that the patient makes the round of the clinic without doubling on his tracks. The confusion and disorder of busy days are thus reduced to a minimum.

SEX EDUCATION AND VENEREAL DISEASE

Does sex education begin too late to be of real service in safeguarding young people against venereal disease, is the question raised in a recent report issued by the United States Public Health Service. The authors of the article, Dr. C. C. Pierce, assistant surgeon general, and Edgar Sydenstricker, statistician, are careful to explain that the statistics available as to the ages at which the disease is most often contracted, are as yet too scanty to do more than suggest the question, and cannot answer it.

These statistics, so far as they go, however, suggest that children, especially those of the class which is ordinarily considered most likely to be infected, leave school long before the age at which sex education in regard to the twin diseases is commonly given. The earliest incidence as shown by these records appears in men at the age of fifteen and shoots swiftly upward at sixteen, reaching maxima at nineteen and twenty-three. After twenty-three it drops as rapidly as it rose. Attention is called to the apparent significance of the fact that the years betweeen sixteen and twenty-three are those between the usual ending of school, and the beginning of married life. For the women, the incidence of the disease ranges about two years earlier than in men.

The Public Health Service is now engaged in assembling and tabulating a very much larger number of cases which will probably give much more definite results.

DOCTOR'S SOCIAL ATTITUDE IN VENEREAL DISEASE CLINIC*

Perhaps the one factor on which more than any other hinges the success or failure of the venereal disease clinic is its man-power. Advances in urology and syphilology have been so rapid in the last decade that only the physician who has kept in stride with progress is competent to grace the staff of the clinic.. But aside from the scientific qualifications of members of the staff, there is another consideration, the importance of which is too frequently overlooked; namely: The personal or social attitude of the doctor toward the patient. Many a physician becomes so engrossed in the treatment of the patient's disease that he is likely to overlook the treatment of the patient himself. Every patient is a "case," and as such should be critically, impersonally, and objectively studied with the same interest as is employed by the biologist in examining a newly-discovered beetle. Every patient is also a tangled bundle of opinions, prejudices, sensibilities, likes and dislikes, which bundle no psychologist has yet succeeded in unraveling. He resents being treated as a mere specimen. He has come specifically to seek physical relief, but desires also human sympathy and understanding. He craves the good will and favorable opinion of the doctor and offers his friendship in return, for in the doctor he has found one who has a real understanding of his physical distress or difficulty. He is entitled to all the courtesy and consideration which a physician would give his best private patients.

*Treatment of the Venereal Disease Patient, by H. E. Kleinschmidt, M.D.

DELAWARE OUTLINES PLAN FOR STATE CARE OF MENTAL DEFECTIVES

More and more the different states are beginning to realize the perils that result from neglecting the complications that mental diseases introduce into the problems of delinquency, crime, dependency, and other social ills, and are taking steps looking to the cure and to the prevention of these diseases. They are stressing preventive work among children particularly, both because these are the most easily accessible and most easily studied, and even more because, as is now thoroughly understood, they are likely to suffer from many small and easily remediable health defects which, if neglected, may very probably heavily handicap them through life.

Delaware is the latest state to take action. As a result of a two year survey in Sussex County, made by the United States Public Health Service in collaboration with the Children's Bureau, the state officials engaged in the care of mental defectives, have become intensely interested in the establishment of a bureau of mental hygiene in connection with the state board of charities to deal with the subject.

At the request of the secretary of the board, the representative of the Public Health Service who had directed the survey was sent to Delaware to outline a program for the institutional care and community supervision of the mental defectives resident in the state.

First steps in carrying out this program have been taken by the appropriation by the legislature of $60,000 for improving the care and treatment of the mental patients in the state hospital at Fahrnhurst. A training school for nurses specializing in neuropsychiatric diseases will be opened; reconstruction aides in both occupational and physicotherapy will be engaged; and additional physicians will be employed.

MISS FITZGERALD TO MANILA

Miss Alice Fitzgerald has been appointed a special member of the staff of the International Health Board of the Rockefeller Foundation to serve as consultant in nursing in the Philippine Islands in connection with a program of cooperation recently entered into by the Foundation and the government of the Islands. Miss Fitzgerald will sail for Manila early this month.

MEETINGS, CONVENTIONS AND CONFERENCES

AMERICAN CONFERENCE ON HOSPITAL SERVICE HEARS AGGRESSIVE PROGRAM

WHAT the 150 physicians and hospital administrators in attendance characterized as the most aggressive and far-seeing program of papers yet presented at a session of the American Conference on Hospital Service was heard on Friday, March 10, in Chicago when that body met in conjunction with the annual Congress on Medical Education, Licensure, Public Health and Hospitals. The hospital program consumed the final session of the five-day congress held in the Congress Hotel. On the preceding evening the business meeting of the American Conference on Hospital Service took place.

Three salient themes occupied the hospital workers. They were: training courses for hospital superintendents, discussion of which was provoked by an able paper by Dr. A. C. Bachmeyer, superintendent of the Cincinnati General Hospital; standardization principles and problems, treated by that pioneer in the field, John G. Bowman, chancellor of the University of Pittsburgh; and the hospital dispensary, the subject of the entire afternoon's program discussed from three distinct viewpoints by Dr. William S. Thayer, clinical professor of medicine, Johns Hopkins University; Michael M. Davis Jr., chief of the Service Bureau on Dispensaries and the Community Relations of Hospitals of the American Hospital Association; and John E. Ransom, superintendent of Michael Reese, Dispensary, Chicago.

Dr. Frank Billings, president of the American Conference on Hospital Service since its establishment and reelected to that office for the ensuing year, presided.

Three Principles in Standardization

In viewing the standardization program of hospitals, Chancellor John G. Bowman in his address saw three fundamental principles: (1) The aim of hospital standardization must be within the purposes the hospitals have consciously put for themselves; (2) the program must be flexible; (3) the individual must be held accountable for his action or his failure to act.

"Hospital standardization is an educative process," declared Chancellor Bowman, "and as such it is all one with a moral service. It is at the same time a practical and a scientific service.

"The hospital program must be flexible. It cannot be formulated into a set of rules but should be a mark for future attainment. First may come rules but rules must evolve into principles and principles give way to understanding. The objective toward which the hospital strives must be clear, radiant. Everybody in the institution must feel not only intellectually but emotionally the ideals and purposes of the hospital. Ideals must dominate routine. In flexibility only lies the incentive for happiness and success.

"Responsibility is the very heart of the program of hospital betterment. In twenty-five years the most significant thing in medical service has been the fact that the hospital has assumed some real responsibility to the public for the care of its patients. It has developed from a boarding house into an institution with character and responsibility. Workmen's compensation laws have stimulated among hospitals the sense of responsibility. Again, the advance in the science of medicine has created a wide and natural discrepancy between the skill of doctors. As a consequence the individual desires some check on his own choice of physician and the hospital must assume this responsibility."

Chancellor Bowman paid tribute to Dr. Billings in his address attributing the success of the American Conference on Hospital Service to the stabilizing influence of its president. At the establishment of the Conference he believed the program was not aggressive, but rather negative, said the speaker, but the organization has already advanced far beyond his anticipation.

Fears "Closed Hospital"

In the discussion of standardization which succeeded Chancellor Bowman's paper, Dr. Malcolm L. Harris, president of the Illinois State Association on Hospital Standardization, aroused the convention by his criticism of the standardization program. Dr. Harris argued that the program was leading toward the "closed hospital" and such an "audacious policy must end disastrously."

"That medical men should be represented on every board of trustees," said Dr. Harris, "is absolutely essential. I am of the opinion that the majority of the board should be medical men. The medical profession should resent this growing idea that the patient belongs to the hospital."

Among those who challenged Dr. Harris' statement was Dr. Herman Smith of Michael Reese Hospital who declared that Dr. Harris' opinions did not represent the ideas of the majority of hospital workers in Illinois.

Dr. George W. Swift of Seattle, Wash. was first to attack the statement of the president of the Illinois association.

"The presence of a doctor on a hospital board of trustees is fatal," said Dr. Swift, who heads the Washington

State Association on Hospital Standardization. "We have had to request physicians to get off our boards of trustees. They are always older men with life-tenure jobs and they block standardization."

The Seattle doctor made a plea for a lowering of the intern requirements of the standardization program so as to enable more western hospitals to qualify.

Hospitals Have Three Moral Obligations

Rev. Fr. Charles B. Moulinier, president of the Catholic Hospital Association, followed Dr. Harris is a discussion of standardization principles. He declared that the medical profession had realized that its fundamental obligation was to improve the type of men within its ranks and had accomplished this through raising educational standards. The hospital, he said, has a great moral responsibility made up of three moral responsibilities, that of the medical, nursing and hospital professions. The public has a right to expect 100 per cent up-to-date scientific institutional care and that institution has failed when one member of its staff makes an error.

The difficulty in applying definite standards in rural hospitals was stressed in a voluntary discussion by Dr. Paul W. Goldsbury of Deerfield, Mass. In the city hospital, said Dr. Goldsbury, one is impressed by the machinery; in the rural hospital it is the personality of the staff which impresses one. The smaller the hospital the more difficult it is to have standards, he declared, but the more necessary it is to have ideals.

Dr. Arthur C. Bachmeyer's paper on "The Qualifications and Training of Hospital Superintendent's" printed on page 338 of this issue was one of the outstanding contributions to the program and investigation on that subject.

Statistics showing the large and growing preponderance of small hospitals were quoted and the indefinite source of supply for executives in this specialized field of endeavor was made plain.

"Drift" Into Hospital Administration

"Medical men, nurses and laymen in increasing numbers drift into administrative work," said Dr. Bachmeyer. "Because of this 'drifting' and because in many instances boards of trustees are not cognizant of the proper functions of a superintendent, many institutions are not playing their proper role in the life of the community they seek to serve and are not being properly and efficiently administered.

"If our colleges can prepare men for other professional and technical vocations they certainly should be able to prepare men and women for administrative positions in our hospitals. The aim of such a course should be to train men and women at maturity of mind, broad vision, good perspective, executive ability, initiative, ability to coordinate the work of an intricate organization and to correlate the hospital with other agencies in the community. The training should primarily give the student inspiration and viewpoint. He should be led to think of the hospital in terms of its relation to the community, to the medical and nursing professions and to society in general.

"Because of the limited remuneration now being paid the majority of superintendents and because of the varied type and size of institutions, the course should be restricted to a rather short period of time, not more than twelve or at most eighteen consecutive months. Although medical education is a distinct value, matriculation should not be limited to graduates in medicine only. The matriculant should possess a general knowledge of the business, social and economic world, a broad general background, and training and experience equivalent to a college degree."

The following subjects were suggested by Dr. Bachmeyer as a part of the course: history of the hospital and its various services, sanitation and hygiene, biology, sociology, jurisprudence, business science, domestic science, building and power plant operation, and maintenance and administration. After a period of twelve or eighteen months in intensive didactic and practical instruction, the student should spend further time in an apprenticeship, not without financial remuneration.

Urges Research in Hospital Administration

Edwin R. Embree, secretary of the Rockefeller Foundation, a committee from which is surveying the opportunity of training hospital executives, led the discussion which followed the Bachmeyer paper. Mr. Embree declared that schools must not only teach students in hospital administration the known facts about hospital management but more important they should extend the known science. To pass on the known knowledge only would be quite sterile, he declared. Field studies must be carried on in such schools to keep the instructors alive. The difficulty, as he sees it, in fixing a curriculum lies in the fact that no one knows what the hospital will be ten years hence.

The technique employed in the study of hospital administration and qualifications for it was described by Dr. Willard C. Rappleye, chairman of the Committee on Survey of Opportunity of Training of Hospital Executives of the Rockefeller Foundation.

"The performance of a hospital," said Dr. Rappleye, "is judged on the adequacy with which it performs its three basic functions. These are the adequate care of patients, education of personnel, patients and the public, and investigation or research."

Many of the mistakes and much of the ignorance which has resulted in the failure of institutions will be prevented when proper instruction in hospital administration is given to properly qualified men, according to Dr. A. R. Warner, executive secretary of the American Hospital Association, in his part of the discussion. The function of such training will be to do away with the mistakes which most hospital executives of today made in their early years in administration, he said.

In the general discussion of the topic which followed Dr. C. C. Burlingame of the Presbyterian Hospital, New York, declared that before courses in training hospital executives could be provided, the question of what part the superintendent is to play in hospital organization must be defined. Is the superintendent to be the secretary of the board of trustees, a guide to conduct committees about the hospital or the head of the institution in every sense of the word are the questions Dr. Burlingame put. His idea of the superintendent's duties is that he be the coordinating agent between the medical, financial and all other interests.

Sees Danger in Overhospitalization

Dr. Billings in a closing statement concluding the morning section of the program, which dealt directly with hospitals, declared that in his opinion seventy-five per cent of the people who require medical and surgical care can acquire it outside the hospital.

"We should not too fully hospitalize the public," was Dr. Billings' contention. "The welfare of the United States depends upon the maintenance of the family home. The family home is dependent upon the domiciliary visitation of a doctor."

Miss Donelda R. Hamlin, director of the Hospital Lib-

rary and Service Bureau, gave a report of the first year's work of that service which convention officials expressed as most gratifying.

The dispensary, topic of the afternoon session, was treated from the standpoints of its function in medical education and as a diagnostic clinic, its relationship to the public and to the medical profession and its relationship to the hospital.

Dr. William S. Thayer in speaking of the dispensary as a factor in medical education discussed the subject from four angles: the value of the dispensary to senior medical students; its value as an agency to keep in touch with the ward patient; its importance as a case unit index; and its value as a center of a department of industrial medicine.

"Few schools use the dispensary for senior students," said Dr. Thayer. "While it has a great value to beginners in history taking and has a value for special clinics, its greatest worth is that it provides for the senior medical student the same field which ordinary medical practice offers. In the dispensary the student can familiarize himself with the anatomy, the physiology and psychology of minor as well as grave diseases. From the standpoint of medical education it offers much."

The diagnostic clinic, according to Dr. Thayer, has a distinct value to the physician in that it offers him assistance through expert diagnosis. Such clinics have a real duty toward doctor and public. When diagnosis is undertaken for a doctor, Dr. Thayer believes, the clinic should make it less time-taking than regular dispensary service. By appointment the clinic should give a limited number of consultations for diagnosis during the day at modern rates.

Advertising in connection with the diagnostic clinic is in very bad taste, Dr. Thayer asserts. There is no sounder reason why a group of physicians conducting a clinic should advertise than for a single doctor. Nor is there any greater reason, as he sees it, for the dispensary in a general hospital to advertise than for the hospital proper.

Michael M. Davis Jr. discussed the dispensary from the viewpoint of its relationship to the public and to the medical profession of the community.

"So astonishing has been the rate of growth of the dispensary," declared Mr. Davis, "that it must be no longer regarded as a charity but as a form of medical practice. The hospital and dispensary are a unit; their medical staff should be one, and their administrative staff one.

"In the dispensary the medical profession must have complete professional control of professional work and a group of citizens must have complete control of the policy of the institution. These are fundamental for the success and development of the dispensary.

"The dispensary must deal in treatment as well as in diagnosis. Its goal must be larger service to more people. It will take a long time, but eventually the dispensary must serve a much wider range of persons financially."

In the ideal dispensary that Mr. Davis presented there should be one doctor responsible for each patient. There should be no exploitation of doctors. The dispensary would be open to all physicians of the community as is the hospital. There would be a personal relationship between doctor and patient.

John E. Ransom in speaking on the relation of the dispensary to the hospital, divided his topic into four parts, staff, service, financial and community relationships.

"The out-patient department requires advocates who actually sit in the seats of the mighty," he declared. "It needs a live committee of its own members to function with the trustees. Ideally there should be one stamp of quality applicable to the hospital as a whole.

"The dispensary must not be the staff man's purgatory. The hospital must sell its out-patient department to its staff; if it can do that it can buy back for the dispensary all it needs of their services. The out-patient department should furnish material for the future major staff so that when vacancies arise the dispensary doctor may know that he has some chance of professional advancement.

"So frequently the dispensary is located in the basement that it must really be the very foundation of the hospital. From the standpoint of its real service to the hospital the great need is for better articulation between the out-patient department and ward.

"More money is needed for the dispensary; its value is unknown to the giving public. It has been said that the out-patient department is the Cinderella of the hospital household; in such case the prince's ball is the meeting of the budget committee and the fairy godmother is not to be found. Publicity should be given the dispensary in terms which its clientele can understand."

Dr. George Dock, professor of medicine, Washington University, St. Louis, in his discussion added to Dr. Thayer's claim of the value of the dispensary in medical education by citing its training in speed. The student who learns entirely within the hospital is apt to go into practice a slow worker, he declared, while training in the out-patient department demands that he be quick.

Dr. Arthur Dean Bevan, professor of surgery, Rush Medical College, Chicago, took issue with Dr. Thayer in that the student should be put in the dispensary the fourth year. He believes the third year should be spent in the dispensary and the fourth in the hospital. The general practitioner, he agreed with Dr. Billings, should be the overshadowing figure in medical practice. He can take care of from eighty to ninety per cent of all cases much better than any group of specialists in the hospital or dispensary, he believes.

"Medicine has dismembered the patient's body by specialization, said Miss Ida M. Cannon, chief of the social service department at Massachusetts General Hospital in Boston, in a brief discussion, "and it is up to the social worker to be something of a correlating factor. In the dispensary it is impossible for the doctor's personality to extend to the patient, and it is vital for the purpose of diagnosis and treatment that something of the patient's family and industrial history be known.

Dr. George S. Shambaugh, professor of oto-larynology at Rush Medical College, Chicago, explained before the convention his system of placing postgraduate students in his department to perform routine duties. By this method he declares the patients are getting proper care, the regular attendings are finding their work, minus the routine, more interesting, and for a small number of men the problem of the proper training for practice has been solved.

Alfred C. Meyer, president of Michael Reese Hospital, Chicago, explained in his discussion why he does not believe in the complete unification of the in- and out-patient service. The ideal dispensary of the future, in his opinion, will in addition to the requisites outlined by Dr. Thayer be aggressive and have a more militant social service department. It will not content itself with handling problems that arises within it but will go out into the community. The social service department will deal not only with the patient but will attempt to remedy the maladjustments in the patient's family which hinder his convalescence.

Adv. page 42

AMERICAN CONFERENCE ON HOSPITAL SERVICE TO SPONSOR A NATIONAL HOSPITAL WEEK

ACTION looking toward the inauguration of a National Hospital Week and toward the formulation of a definite program of constructive work for the Conference were the outstanding features of the annual meeting of the American Conference on Hospital Service held at Chicago, Ill., on the evening of March 9, 1922.

"During the last five or six years," said Dr. Frank Billings in his opening remarks, "an earnest effort has been made by several national organizations to rate hospitals upon standard lines in the promotion of better service to the sick and injured. This movement has emphasized the manifold ramifications which the hospital plays in the social and economic life of the public. The men and women who have taken leadership in this national program of hospital betterment have long had in mind the desirability of organizing a thoroughly well planned effort to educate the public upon the benefits which the hospital affords the community and the need of a larger and more intelligent support of the hospital by the public.

"It is believed by those best qualified to know that the education of the public and an aroused interest of the community in the support and promotion of the hospitals of the country will be secured and maintained throughout the year by the establishment and observance of an annual Hospital Week.

Compliments Hospital Day Committee

"It is believed that the hospitals, particularly those which lack publicity of their own, will welcome a plan which is nationwide to promote public interest in existing hospitals and in the organization of new hospital projects in communities where they are much needed. This suggestion of an annual National Hospital Week affords a reasonable promise of productive results in view of the great interest which was so readily aroused in the observance of National Hospital Day on May 12, 1921, the anniversary of the birth of Florence Nightingale. The National Hospital Day Committee deserves commensurate credit for the establishment of National Hospital Day; its activities have served a very useful purpose as an initial step in the right direction.

"Inasmuch as the hospital field is so large, it naturally occurs to one that there is need of a thoroughly organized effort to promote the education of the public which will be sponsored by all of the national organizations which are interested in the various subjects included in the hospital field. Therefore, since the American Conference on Hospital Service was organized as a clearing house for these associations, it is believed that the proposed work of organizations in the establishment of an annual Hospital Week logically falls within the scope of its activities.

Suggested Outline of Activities

"The week will be devoted to the promulgation of publicity propaganda, local, state and national, in behalf of the hospitals and dispensaries of the country. The purpose will be: To develop a better understanding between the hospital and the community in regard to its problems and its work; to create a sense of responsibility in the public mind which will lead to constructive criticism, to pride of achievement and to the active support of the hospital as an economic asset; to promote a week of open house to the public in the endeavor to establish a sort of family intimacy and a discussion of the problems, successes, accomplishments and needs of the hospital; to give account to the public of its stewardship for the funds received in trust and on the record made to justify the request for additional aid and support; to feature the department of nursing of the hospital by including in the National Hospital Week, May 12, the anniversary of the birthday of Florence Nightingale. This will recognize and emphasize the good work already accomplished and will preserve and continue the annual Hospital Day.

"During Hospital Week, Sunday will be properly observed in all churches, disregardful of creed or denomination, by a service and address devoted to the care and treatment of the sick and injured and to the activities of the hospital in relation to community health and welfare. Sunday evening church service might probably be conducted by hospital officials including members of the staff, public health officials and other qualified individuals. Even Sunday school service could be devoted to the interests of the sick and injured, especially among children.

"It is suggested that the graduation exercises of training schools for nurses may fall upon the anniversary of Florence Nightingale's birth and by the use of this day and the occasion call public attention to the work and accomplishments of nursing service and the promotion of nursing education.

Special Days for Various Departments

"To select days in the week for the annual observance and demonstration of the activities of the various departments of the hospital and dispensary is also a good plan; for example, on one day demonstrations and special reports of the activities of the departments of social service, of diseases of children, infant and child welfare; on another day a program devoted to the departments of industrial medicine and surgery, physical therapy including occupational therapy, calisthenics, Swedish movements, play and various forms of drill; and like demonstrations of other departments activities on other days of the week.

"The public interest in the demonstration of the activities of the several departments of the hospital will be aroused by securing the cooperation of groups of people including women's clubs, associations of commerce, Rotary clubs and other lay organizations.

"Throughout the week there can be conducted an active campaign for financial support. Experience shows that one annual appeal to the public is more productive than several at irregular periods of time. Furthermore, this one annual financial campaign would be strengthened by the public demonstration of the activities, accomplishments and value of the hospital service to the community. The establishment of an annual Hospital Week is offered as a suggestion to you. If you deem it worth consideration, the plan of organization, the scope and the details of the plan may be worked out by a committee composed of representatives of the Conference who are especially qualified for such work."

Acting on President Billings' suggestion a resolution was presented and adopted "that the president be authorized and instructed to appoint a special committee to establish and develop the observation of the week in which Florence Nightingale's birthday (May 12) occurs as Hospital Week, substantially as set forth in the address of the president

Adv. page 44

"America's Most Famous Dessert"

Institutional Size
makes one gallon

Packed in Two Sizes

Domestic Size
makes one pint

These two products are exactly the same except in size. The INSTITUTION that specifies **JELL-O** is assured of serving its patrons with exactly the same quality of jelly that they are accustomed to in their homes. Ask any good housekeeper what jelly powder she always insists on having

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LeRoy N.Y. *Bridgeburg, Ont.*

but with full power to develop, extend and modify details as necessity shall require and as opportunity shall dictate and be it further

"RESOLVED, that this committee shall be authorized to appeal for and to receive funds for this purpose, to make public announcement of Hospital Week and to suggest programs all in the name of the Conference and also to solicit cooperation in this program from the member organizations of the Conference."

Committee to Formulate Program

It was also resolved "that the president be authorized to appoint a committee of such number and persons as shall in his judgment seem wise and of which he shall act as chairman to consider all possibilities in a program of policies, of vitalization and of activities of the Conference, and be it further

"RESOLVED, that this committee shall report to the president such recommendations as it may care to make in regard to such a program for the Conference and to suggest such acts to develop ways and means and such changes in the constitution and by-laws as may appear to them necessary to carry out their recommendations and be it further

"RESOLVED, that the president be and hereby is authorized to call a special meeting of the Conference to consider this report."

The American Institute of Homeopathy was elected a constituent member of the Conference.

The following officers were elected for the ensuing year: President, Dr. Frank Billings; first vice-president, Dr. A. R. Warner; second vice-president, Miss Ida M. Cannon. The following trustees were also elected for a period of three years: Dr. A. C. Bachmeyer, Mr. John G. Bowman, Dr. John M. Dodson.

Accredited delegates present from constituent members of the Conference were: Dr. Thomas Crowder, Miss Ida M. Cannon, Miss Waters, Mrs. Mary DeGarmo Bryan, Mrs. Esther Ackerson Fisher, Dr. A. R. Warner, Dr. John M. Dodson, Dr. W. S. Thayer, Miss Mary E. Wheeler, Rev. C. B. Moulinier, Dr. David Strickler, Dr. A. C. Bachmeyer, Mr. T. B. Kidner, Capt. Charles M. DeValin, Commander O. J. Mink, Dr. McCoy, Dr. M. J. White.

CONNECTICUT ASSOCIATION MEETS

The Connecticut Hospital Association held an enthusiastic meeting in Hartford on February 25 which was attended by thirty-six hospital executives and workers.

At a business session which consumed the morning were heard the reports of the president, Dr. Harold W. Hersey; the reports of the secretary and treasurer given by Miss K. M. Prindiville; the report of the committee on by-laws; and an account of the formation of the New England Hospital Association by Dr. L. A. Sexton. Action was taken at the convention which will provide for meetings of the association quarterly, the next to be held in April.

Following a luncheon at Hotel Bond, round table discussion was participated in and those who had not previously seen the nurses' recruiting film "The Call of the Hour" were shown the motion pictures through the courtesy of Dr. John J. Brenehan.

The thirty-six in attendance represented the following hospitals: Bridgeport Hospital, Bridgeport; Day Kimball Hospital, Putnam; Danbury Hospital, Danbury; Greenwich Hospital, Greenwich; Griffin Hospital, Derby; Hartford Hospital, Hartford; Lawrence and Memorial Hospital, New London; Litchfield County Hospital, Winstead; Meriden Hospital, Meriden; New Haven Hospital, New Haven; New Britain Hospital, New Britain; Norwalk Hospital, Norwalk; St. Francis Hospital, Hartford; St. Joseph's Hospital, Willimantic; Stamford Hospital, Stamford; Waterbury Hospital, Waterbury; Yale Hospital in China.

HOSPITAL ASSOCIATION IN AUSTRALIA

New South Wales is the first Australian state to form a hospital association. The New South Wales Association is modelled after the hospital associations of Great Britain and America and was organized at a recent meeting of representatives of forty hospitals.

Hospital finance and treatment of venereal disease were the two chief topics on the two-day program at the organization meeting. Mr. Waterford of Quirindi is president of the new organization and R. J. Montgomery of the Royal Prince Alfred Hospital at Sydney was elected secretary.

In commenting on the new association the *Prince Alfred Hospital Gazette* says: "As long as the organization keeps clear of politics—which does not necessarily mean party politics—it should prove to be most valuable as an educational medium and it should also tend toward influential joint action in matters of mutual interest. In other countries such as Great Britain and America, hospital associations have existed for years with great benefit to hospital administration and sequently to the sick-poor who are treated in the hospitals."

Although the New South Wales association has just been organized, a district hospital association has been active for some time in the southern portion of the state.

In his discussion of the financial conditions of New South Wales hospitals before the convention, a representative of the Minister for Health and Motherhood admitted that their present position is acute and that some further means of raising money for hospital maintenance must be found. After a careful consideration, he declared, he had come to the conclusion that the voluntary system had not failed, and that some method of keeping that system in force must be found. The time has not yet come, he said, when the state should take over and run the hospitals. Neither did he favor the introduction of the municipal system of control.

Out of his address the conference approved the drafting of an amending act which would give hospitals power to levy a contribution on both employers and employed in a given district if it had not met its obligations in the way of providing income.

Resolutions passed at the convention requested the government to put into operation the Venereal Diseases Act and protested against the suggestion of the Minister of Health and Motherhood to allow chemists to treat venereal disease.

HARVARD COURSE IN REHABILITATION

The Harvard Graduate School of Education, Harvard University, will offer a summer course in the Rehabilitation and Re-education of Handicapped Persons July 10 to August 19 under the direction of W. I. Hamilton, industrial research secretary of the National Tuberculosis Association. The course is expected to attract occupational aides in hospitals, teachers of the handicapped, "after-care" nurses, workers in employment bureaus for the handicapped, agents of state rehabilitation services and of the Veterans' Bureau, and others interested in rehabilitation as a part of a constructive social service program.

Adv. page 46

HINTS TO HOSPITAL SUPERINTENDENTS

INVITING PATIENTS' SUGGESTIONS

Many hospitals invite patients' criticism and give assurance that suggestions for the betterment of service will be given consideration by means of form letters addressed by the superintendent to each incoming patient. The following mimeographed letter on the hospital stationery is delivered to each patient at the Vancouver General Hospital and may prove an interesting model for other institutions who approve the suggestion:

"To Margaret C. Goodwin,
"Ward D 106.

"It is our earnest desire to please you in the service we can render you while in the hospital. To that end we want your cooperation in helping us to do so. The management of this hospital is always anxious to know of complaints and to remedy same at once. Therefore, if you have any or if you have any suggestions regarding betterment of the service, we shall be most pleased if you will immediately notify the nurse in charge of your ward or the executive officer under whom this department comes. All suggestions and complaints will be received most courteously and the latter adjusted as satisfactorily as possible. Executive officials from the medical and nursing departments endeavor to visit all the patients daily, and will be very glad to talk to you at any time.

"Trusting that your stay in the hospital will result in your complete restoration to the best physical health, and that we as a hospital administration may serve you satisfactorily."

EDUCATING HOSPITAL TRUSTEES

Hospital superintendents should endeavor to educate their boards of trustees in institutional administration and to this end the following suggestions may be of assistance:

1. One or two of the members of the board of trustees should be appointed each month to make a complete survey of the institution and report their findings at the monthly meeting. When they make this tour of the hospital it would be better if they were unaccompanied by any official. They could consult with an official when the tour was complete.

2. Hospital trustees should be encouraged to read consistently a good hospital magazine.

3. The board of trustees should be given a monthly report of the medical work of the hospital so that they may more fully realize their responsibility as institutional custodians of the health of the community.

4. An excellent plan in use in some institutions is the practice of giving talks at the monthly board meeting on some phase of hospital work. A department head might give a brief survey of his work, or several members of the staff might give two or three minute talks. These would give the trustees a better idea of each phase of the work of the institution, and an opportunity to size up their employees as well.

5. In some hospitals today it is found most valuable to have the monthly board meeting and all committee sessions during the luncheon hour or in the evening at dinner. No doubt meetings associated with luncheons and dinners bring out a better esprit de corps.

Hospital superintendents must remember that trustees are usually not men of the medical profession, and they need an opportunity to acquire information about the institution in order that they may more intelligently deliberate on questions arising in their meetings.

INSPIRATION ON CASE RECORD SHEET

Of constant inspiration to doctor and nurse must be the lines which are found on the first sheet of each chart or case record of the Vancouver General Hospital. The cover page of each chart contains blanks for the patient's name, hospital number, ward, date of admission and doctor. Below these are two paragraphs pointing the physician and nurse to the way of close personal relationship with patients. The contents of the page are given below.

Name .....
Hospital Number .....
Ward .....
Date of Admission .....
Doctor .....

"There are two main factors which make for success in hospital work—skill and kindness. Both are important. Doctors and nurses ought to know their work and be artists in the performance of it. They should love it for its own sake, apart from any monetary gain. Besides this, they should always remember they are dealing with folks who are not only sick or wounded in body but generally much distraught in spirit; and while they minister to the stricken body they should not fail to minister to the stricken mind. The patient is often fearful, melancholy, irritable, irrational, easily perturbed, very sensible to pain or slight. Doctors, nurses and students who are tactful and able to handle with grace patients emotionally unstable, wilful or unreasonable, and at the same time render skilful attention to the sick body, have entered the Promised Land of their profession. Such are to be congratulated; and the hospital which has the greatest number of these 'top-notch' people around is the hospital to which the people will flock for help when they are sick.

"The best publicity a hospital can secure and the most important factor in its success as an institution is to send all its patients home well pleased with the treatment they have received when ill. The hospital with its equipment and personnel is to assist the doctor in every possible way to bring the patient back to health in the quickest and most comfortable manner, and thus develop in the patient an appreciation of such service. To accomplish this there must be a close personal touch developed between staff and patient. This can be obtained by a keen appreciation and anticipation of what the patient needs and prompt attention to all these, whether large or small. At all times the question uppermost in the minds of those who serve should be: "Are all my patients satisfied?" After all, the service we can render our patients is the acid test of how we are discharging the duties and responsibilities falling on us in this work."

Adv. page 48

QUERIES AND ANSWERS

COST OF COMMUNITY HOSPITAL

To the Editor of THE MODERN HOSPITAL:

Under conditions now prevailing what would be the cost of a thirty-bed community hospital?

HOSPITAL ASSOCIATION.

"Thirty-bed community hospital" is a rather vague term. One community may wish to place most of its beds in private rooms, while to another open wards may commend themselves. Most communities, I take it, prefer a mixture of single rooms and ward service. Let us turn to a concrete example of a small country or community hospital now under way, analyze its contents, and estimate its cost. Variations from the program given can then be worked out to suit your own case.

The plan under consideration provides accommodations for 43 beds, divided as follows:

Single rooms	17 beds
Women's ward (individual cubicles)	8 beds
Men's ward (individual cubicles)	8 beds
Maternity ward (individual cubicles)	6 beds
Children's ward (individual cubicles)	4 beds

(Nursery beds not separately counted).

Of the seventeen single rooms two have private baths and four private toilets. Part of the domestic and nursing staff is to be accommodated outside of the hospital. Within the hospital building the following accommodations have been provided:

Superintendent, bedroom and bath.
Dietitian, room.
Intern, bedroom and bath.
Seven single rooms for nurses (toilets and baths).
Nurses' sitting room and dining room.
Operating room, sterilizing room, scrub-up room, doctors' dressing room and anesthesia room.
Delivery room.
Clinical laboratory.
X-ray room, dark room and small dressing room.
Dental room.
Separate porches for ward and private patients.
Ward and private patients' services on separate floors, and for each group charting space, medicine closet and sink, pantry, utility room, linen room and supply closet.
Locker room for graduate nurses.
Four bedrooms for male help (capacity eight beds).
Waiting room and treatment room for out-patients.
Clinical record room.
Office and reception room.
Kitchen, storage for kitchen supplies, helps' dining room.
Storage for miscellaneous supplies.
Laundry with separate assorting and clean linen rooms.
Boiler room (but no lighting or power plant).

The building measures 397,000 cubic feet. As to the cost of fireproof construction, recent estimates vary from 46 to 48 cents per cubic foot in the Middle West, to from 60 to 65 cents in the vicinity of New York. Where funds are limited, one might consider the substitution of semi-fireproof or non-fireproof construction, *but only in case it is possible to place all the patients on the ground floor.*

The hospital described above is deficient in accommodations for out-patients, and has no adequate arrangement for social service; by the freer use of ward beds and a reduction in the number of private rooms, these desirable features could be supplied without increasing the size of the building. The absence of dormitory accommodations for female servants will be noted. In the given instance it is proposed to employ women living in the neighborhood.

The same general plan, adapted to thirty beds, would require approximately 320,000 cubic feet. For sixty beds it would be necessary to increase the cubic contents to about 540,000 cubic feet.

If one keeps in mind all of the desiderata of an ideal community hospital, it is difficult to use much less than 10,000 cubic feet per bed. Hospitals of smaller relative content can be and frequently have been built, but only by sacrificing desirable features of service or sanitation.—S. S. Goldwater, M.D.

TRAINING FOR DIETETICS

To the Editor of THE MODERN HOSPITAL:

Would you kindly tell me how a dietitian gets her training, how long it takes to qualify for a position and what salary hospitals pay for this line of work?

A READER.

A dietitian gets her training first by obtaining a good foundation in home economics. This is followed by a few months of training as student dietitian in some hospital having a good dietary department. It will take not less than two years of college training and four months of hospital training to qualify for a position; four years of college and six months of hospital training are better.

From some figures that were collected by THE MODERN HOSPITAL last year, it was found that the average hospital dietitian was then receiving about $1,200 a year, in addition to her maintenance. The salaries vary above and below this figure depending very largely upon the size of the institution.

DISINFECTING DISHES

To the Editor of THE MODERN HOSPITAL:

Can you give us any information as to the best way of disinfecting dishes used by typhoid patients in a small fifty bed hospital? Also, any information as to the best kind of dishes for use in typhoid rooms would be very much appreciated. PRINCIPAL OF TRAINING SCHOOL.

For disinfecting dishes used by typhoid patient have a utensil sterilizer put in the diet kitchen so that dishes may be taken directly from the patients, put into the sterilizer and swilled in an open can, which should be kept beside the sterilizer. Then boil them for ten or fifteen minutes, after which they may be washed in the diet kitchen sink. After collecting the dishes used by typhoid patients the nurse should wash her hands before doing anything else.

The dishes should be of heavy earthenware and sterilizing does not break them very often. Glasses, however, will break, and we have found that the cheaper grade breaks no oftener than the higher grade of glassware—D. L. Richardson, M.D.

Adv. page 50

BOOK REVIEWS AND CURRENT HOSPITAL LITERATURE

A FORM OF RECORD FOR HOSPITAL SOCIAL WORK

By GERTRUDE FARMER, Director, Social Service Department, Boston City Hospital[1].

Miss Gertrude Farmer in her recent book, "A Form of Record for Hospital Social Work," has made an unique contribution by adapting a form of social record to meet hospital needs. A departure is made from the chronological type of record now in common usage and substituted is a summary form which reports results rather than processes in diagnosis and treatment. Case technique is clarified by thought-provoking captions which necessitate an interpretation of the social needs of the patient, as based on his medical diagnosis. The economy of this form of record lies in the minimum of time and space necessary in typing and filing. With elimination of detail its brevity makes the record content readily available for the use of busy physicians, workers and outside agencies. Mrs. Ada Sheffield who indorses this book, in the preface states: "A record is treated for the important thing it is, namely, it is the worker's thinking objectified."

Miss Farmer has so ably expressed the adaptability of this form of record for hospital use that workers facing problems in relation to case histories would find numerous and invaluable suggestions in this book. The concluding chapter contains illustrative records which give practical insight into Miss Farmer's method of record keeping.

NOSTRUMS AND QUACKERY

Prepared, compiled and edited by Arthur J. Cramp, M.D., Director of the Propaganda Department and Bureau of Investigation of *The Journal of the American Medical Association;* reprinted with or without modifications from *The Journal of the American Medical Association.* Vol. II.[2]

Far more replete than the original volume of a decade ago is "Nostrums and Quackery," Vol. II, from the American Medical Association Press. The compiler has selected from current material more than 800 pages of evidence against the "patent medicine" and quackery evil, part of which is reprinted from articles in the A. M. A. Journal in its determined campaign against fraudulent activities. The new work is significant for its thoroughness of treatment; its scope is broad and its conclusions unescapable. Illustrations tell the story in many cases. The book is divided for convenience of treatment and of perusal into exposés of alcohol, tobacco and drug habit cures, consumption cures, cosmetic nostrums, cough medicines, deafness cures, epilepsy cures, female weakness cures, nostrums for kidney disease and diabetes, medical institutes, medical mail order concerns, men's specialists, mineral waters, miscellaneous nostrums and specialists, obesity cures, drugless quackery, rheumatism cures, tonics, bitters and miscellany. The material is handled in a thoroughly scientific manner, allowing the reader to place his own interpretation on the facts presented.

EPHRAIM McDOWELL

Ephraim McDowell, Father of Ovariotomy and Founder of Abdominal Surgery, with an appendix on Jane Todd Crawford. By August Schachner, M.D., F.A.C.S., Louisville, Ky.; octavo volume of about 350 pages; attractively printed and profusely illustrated with plates in double tone.[3]

Ephraim McDowell in his crude and wild but picturesque setting, amid the daring and the coarseness of the frontier, as a country doctor practicing his profession without a diploma, singly and alone, through his ovariotomy added more to the art of surgery during the short space of his career than all of the rest of the surgical world combined added in the same number of years and during the same period.

The struggle which attended the adoption of ovariotomy and which lasted for fully a half a century is vividly set forth, and the persecutions to which the earlier defenders were subjected is of the keenest interest. It was not until 1861, or more than a half century after McDowell's first ovariotomy, before a favorable word was said for it by a French professor in a French university. In England the situation was very little better, as it was not until a third of a century thereafter that a London hospital could boast of a successful ovariotomy.

A fascinating review of the more important events of that interesting period and place in which he practiced is interwoven throughout the narrative. It is a review of the times and contains thumb-nail sketches of persons who directly or indirectly became associated with the man and his work during his own period and the period that followed.

The importance of the frontier in medicine and in the development of our national characteristics are strikingly portrayed.

The book contains the first real attempt to present a history of the heroine whose cooperation made the premier ovariotomy a possibility. This feature involved a patient and an unusual investigation that ended in the discovery of her grave in an obscure cemetery almost a century after her death.

It contains an elaborate bibliography and a carefully prepared index that makes it valuable as a work of reference upon McDowell and his time but also upon ovariotomy and the earliest efforts in abdominal surgery. It should find a place in every reference library, technical or otherwise, and no surgical library is complete without

1. Lippincott, New York, Philadelphia and London, 1921.
2. Press of the American Medical Association, Chicago, 1921.
3. J. B. Lippincott Company, Publishers, Philadelphia and London.

Adv. page 52

this long delayed effort upon so important and such a fundamental subject.

TUBERCULOSIS AND HOW TO COMBAT IT

By POTTENGER, F. M., St. Louis, Mo.[1]

There is perhaps no other communicable disease concerning which more misinformation is broadcast, than tuberculosis. The lengthy treatises of students and investigators would bring to light the latest information on disputed points, but this is out of the question for the average patient to whom the word tuberculosis is but a recent acquisition to his vocabulary. It is unusual to discover a volume which combines the accuracy and scientific soundness of the student with the simplicity and interesting presentation of the popular writer, but Dr. Pottenger's little book for patients on "Tuberculosis and How to Combat It" is an excellent example of such a union of precision and clearness. Pottenger's complete volumes on "Clinical Tuberculosis" are noted for their thorough and scientific handling of the subject, and even though intended for the lay reader with no medical background, Dr. Pottenger in the preparation of this smaller work has applied the same methods.

All statements are direct and conclusive though not dogmatic; nothing is taken for granted and popular mistaken beliefs are shattered by the clear reasoning of the writer. The book contains forty-three chapters, the first eight chapters dealing with the nature, sources and modes of transmission of tuberculosis, followed by a series of concise chapters expounding the fundamentals of the elements entering into the treatment of the disease. The author is frank to admit our deficiencies in knowledge on many points, but has fortunately included the most modern conceptions in answering such common questions as what are good and bad air, what makes exercise harmful, what constitutes an adequate diet. Chapters on symptomatology and relation of the patient to recovery are considered with the same ability.

The vital importance of early diagnosis and intelligent treatment is stressed by the author. Though residing in a section of the country noted for its salubrious climate Dr. Pottenger treats the much disputed value of climate in an eminently fair and reasonable manner. "Wherever the disease exists, cures take place; and no matter how favorable the climate, patients who neglect their disease die of it." Not all climates are equally favorable for treatment but climate makes up so small a percentage of all the important measures which may be employed advantageously that it may be dispensed with without ruining the patient's chances of cure. The author's insistence and emphasis on intelligent treatment on the part of both patient and physician are well illustrated in his statement, "I would rather be treated intelligently in the worst climate than run wild in the best."

The author claims to have obtained satisfactory results from the judicious use of tuberculin and states that "tuberculin when given properly is of value and entirely harmless; when given improperly it may do harm." In his opinion tuberculin will add at least twenty per cent to the patient's chance of recovery.

The volume is provided with a complete and descriptive index and should receive a wide and generous distribution among the countless tuberculous patients in this country. It is unfortunate that the author did not devote greater space to the consideration of the problems confronting the patient during that very critical period following his discharge from the sanatorium and previous to the resumption of his industrial career.

1. C. V. Mosby Company, St. Louis, Mo.

A PRIMER FOR DIABETIC PATIENTS

By Russell M. Wilder, Ph.D., M.D.; Mary A. Foley, Dietitian; and Daisy Ellithorpe, Dietitian, The Mayo Clinic.[2]

Dr. Russell Wilder and two dietitians, Mary Foley and Daisy Ellithorpe, of the Mayo Clinic, have prepared this Primer for their patients. The material in mimeographed form has been used successfully at the Mayo Clinic for some time. It has been printed in book form in order to more satisfactorily meet the demand for it. This Primer was designed for use as a supplement to Dr. Joslin's Diabetic Manual, the instruction being given in more detail. For example, the chapters on Weights and Measures, Food as Energy, and Urine Testing explain, as well as state facts in such a way that the patient with no information on these subjects can easily follow them. A good selection of menus and recipes is given, with discussion of some food materials used.

2. W. B. Saunders Company, Philadelphia.

BOOKS RECEIVED

MEDICAL AND SURGICAL REPORTS OF THE EPISCOPAL HOSPITAL OF PHILADELPHIA. Vol. V. Committee on Publication, Astley P. C. Ashhurst, M.D., Harold G. Goldberg, M.D., John N. Carson, M.D., chairman. Edited by Astley P. C. Ashhurst, M.D. Press of William J. Dornan, 1920.

LES GRANDES FORMULES MODERNES DE LA NUTRITION, Leurs applications pratiques. By Th. Merrill et H. Violle. Extrait de *La Presse Medicale* du Novembre, 1921. Masson et Cie, Editeurs, Libraires de L'Academie de Médecine, Paris, 1921.

PRACTICAL TUBERCULOSIS. By Herbert F. Gammons, M.D., Superintendent, Woodlawn Sanatorium, Dallas, Texas; Assistant Instructor in clinical medicine, Baylor Medical College, Dallas. With introduction by J. B. McKnight, M.D., Superintendent and Medical Director, Texas State Tuberculosis Sanatorium, Carlsbad, Texas. C. V. Mosby Company, St. Louis, 1921.

MANUAL OF SELECTED BIOCHEMICAL METHODS, As Applied to Urine, Blood and Gastric Analysis. By Frank P. Underhill, Ph.D.. Professor of Pharmacology and Toxicology, School of Medicine, Yale University. John Wiley & Sons, Inc., New York, 1921.

ABDOMINAL PAIN. By Dr. Norbert Ortner, Chief of the Second Medical Clinic at the University of Vienna. An authorized translation by William A. Brams, M.D., formerly Lieut. Com., Medical Corps., U. S. N. and Dr. Alfred P. Luger, First Assistant, Second Medical Clinic, University of Vienna. Rebman Company, New York, 1922.

NUTRITION AND GROWTH IN CHILDREN. By William R. P. Emerson, A.B., M.D.. Professor of Pediatrics, Tufts College Medical School; President, Nutrition Clinics for Delicate Children, Inc.; Medical Adviser, Elizabeth McCormick Memorial Fund, Chicago; Visiting Physician (in charge of nutrition clinic) Children's Out-Patient Department, Massachusetts General Hospital, Boston. Appleton and Company, New York, 1922.

CLINICAL ELECTROCARDIOGRAPHY. By Frederick A. Williams, M.D., Section on Clinical Electrocardiography, The Mayo Clinic, Rochester, Minn. and The Mayo Foundation, University of Minnesota. Philadelphia and London, W. B. Saunders Company, 1922.

THE GLANDS REGULATING PERSONALITY. By Louis Berman, M.D., Associate in Biological Chemistry, Columbia University; Physician to the Special Health Clinic, Lenox Hill Hospital. New York, The Macmillan Company, 1921.

No government has the moral right to invest a company of men with powers which enable them to coin money of the needs of the people, and which practically doom the people to suffering or to unquestioning acquiescence in their exactions.—George Horace Lorimer.

Adv. page 54

FOREIGN CORRESPONDENCE

NORWICH HOSPITAL ON BUSINESS BASIS—HEADS OF LONDON MENTAL HOSPITALS MEET

(By Our London Correspondent)

THE situation in regard to British hospitals appears to show definite signs of improvement, especially outside the London area. As Sir Napier Burnett, director of hospital resources of the British Red Cross, stated in his comprehensive report on the financial position of the voluntary hospitals in England and Wales, excluding London, issued a short time ago, the provincial hospitals are grappling with the problem of effective reform in a more energetic and therefore more successful manner than those of London. The main reason why the hospitals in the country generally are meeting with greater success is because they are organizing; whereas, the London institutions, as a rule, are not doing this. At any rate, although two or three of the London hospitals have organized with excellent results, notably Charing Cross Hospital, there is a lamentable lack of cooperation and coordination among them. In fact, there is little cooperation among the hospitals in any part of the country and while the provincial hospitals have to some extent succeeded better than the London ones, this is because the authorities have placed their affairs on a more businesslike basis.

As an instance of these superior methods of management the Norfolk and Norwich Hospital, located in Norwich, the metropolis of the eastern agricultural counties of England, may be cited. Through the initiative of Mr. Drury, a prominent official of the railway system which serves the eastern counties, ably and strenuously backed by Dr. Samuel Barton and other farseeing members of the Norwich medical profession, what is known as the workmen's contributory scheme was established. These contributions are voluntary weekly levies, varying from one penny per week according to the wages of the contributors. The idea has found favor in all parts of the county of Norfolk and as a source of hospital finance has appealed and is appealing to an increased number of hospitals. Whenever a hospital takes the trouble to organize this form of collection it invariably meets with a rich reward, but, as Sir Napier Burnett points out, organization and propaganda in the form of public meetings held at the important workshops to explain hospital work must be done if success is to be obtained. Such organization and propaganda have been carried on in Norfolk and Norwich with the happiest outcome.

But this is not all that those responsible for the conduct of Norwich Hospital have done to put it on a sounder financial foundation. Everyone who is not indigent and who becomes an in-patient of the institution pays one guinea ($5.25) a week for maintenance. In addition the hospital receives, as do all hospitals of a certain size, a goodly amount from the various local Hospital Saturday Funds, and somewhat meager sums from the War Office Ministry of Pensions, from the education authorities and under the National Insurance Act.

Sir Napier Burnett strongly emphasizes the point that the amount received by the hospitals under the Insurance Act is wholly inadequate and that indeed treatment of such patients imposes an additional strain upon an already overstrained financial situation. It was plainly brought out in evidence before the Care Committee that a very large volume of work was being done by the voluntary hospitals without remuneration, both for in-patients and out-patients who are insured under the National Health Insurance Act.

The authorities of Norwich and other hospitals have shown that if common sense is employed and that if they put their shoulders to the wheel to carry out common-sense methods, they can lift these institutions from the slough of despond into which they have fallen. The Norfolk and Norwich Hospital, by using these methods, has in one year decreased a debt of £50,000 by £8,000 and moreover has run the institution successfully during the period.

Reforms in Mental Hospitals

Recently there has been severe and persistent criticism of the management of mental hospitals in this country. Such grave charges have been brought against the administration of these institutions and they have been so continually made the subject of letters and articles in the lay press, that it was finally thought advisable to call a conference to discuss the question. About 200 medical superintendents of mental hospitals met at the London County Council offices, London, for this purpose.

Sir Alfred Mond, the Minister of Health, who opened the proceedings, said that he was glad to note that the term "asylums" had been dropped in favor of "mental hospitals." The public should be disabused of the idea that lunatics were people very largely incurable for whom little could be done except custodial treatment. The adoption of modern methods of diagnosis and treatment would result in greater economy, and the more lunatics cured the greater would be the relief in expenditure. Medical

Adv. page 56

officers should be granted fuller facilities for post-graduate work, the only method of acquainting themselves rapidly with the subject of mental diseases. The public were still often imbued with the ideas in Charles Reade's novels; but the agitations of recent years were fictitious and untrue. He felt satisfied that all the kindness, care and good treatment possible were available in asylums in existing circumstances. It was unfair to brand the asylum service with any stigma, and the whole stigma in regard to lunacy should disappear. The public did not realize how many patients were cured and discharged from asylums and returned to their normal life as good citizens, and it was important that the cloud of hopelessness in these cases should be lifted. There appeared to be a unanimous opinion at the conference that permanent mental disease could be prevented by early treatment. If early treatment was to be given without certification, an alteration in the present law would be required, and any such alteration would be difficult to achieve unless there was a general agreement on the part of those competent to speak. The conference concluded its labors by arriving unanimously at the conclusion that early treatment of mental diseases without certification should be legalized. The conference further decided that early treatment without certification should be given only in institutions or homes approved for this purpose by the Board of Control.

Briefly the plan is to set apart seven or eight asylums, which only "voluntary boarders" may enter. Objectors to this scheme declare if the proposal is put into execution, it will bring about nothing more than a transference of names. Thus asylums having become "mental hospitals" would be divided into two parts, one for uncertified and the other for certified cases.

An alternative scheme suggested is to provide appropriate cheerful hostels adapted for early uncertifiable cases, run on a purely hospital footing; that is, free from detention, and free also from the stigma and depressing atmosphere associated with lunacy administration.

It has been further pointed out that the provision of hospitals of this nature entails no need for legislation; and it would mean eventually an enormous saving in the £6,000,000 ($30,000,000) a year now spent in the upkeep of asylums. Many empty buildings, with gardens attached, might be made available, and the starting of such sanatoriums should prove an immense boon not only to ex-service men, but to a very large number of medical men, who are at a loss as to where to recommend their patients in the very early stages.

Why should not all big hospitals have an "observation" ward in which patients suffering from mental sickness or disorder might be watched by experts in order that the type of affection might be correctly diagnosed. Skillful treatment under favorable environment will frequently cure cases which closely simulate certain forms of mental aberration and indeed will cure some cases of mental unbalance.

NEW HOSPITAL IS OPENED AT BARNET, ENGLAND

A hospital has been opened at Barnet, England, whose founder suggests that American methods of securing funds for the maintenance of hospitals might be used here. The institution was described in *The Nursing Mirror*, as follows: "Viscount Hampden, Lord Lieutenant of Hertfordshire, recently opened the New Wellhouse Hospital at Barnet. The Barnet Union is a very large one, with a population of over 100,000, and it had become imperative, even before the war, to provide more ample accommodation for the sick. The old infirmary, built in 1886, accommodated fifty-eight patients only. In 1913, being quite insufficient to meet the local needs, the guardians decided to erect a new institution to contain 192 beds. In 1916 the half finished building was handed over to the Army Council, and till May, 1919, between 5,000 and 6,000 wounded and sick soldiers were nursed within its walls. The whole of the furniture and equipment of the hospital has been purchased by the guardians from the Army Council at 10 per cent less than it would have cost in 1913. There are two wards for men, two for women, and one for children, and there is also accommodation for paying patients. This is not altogether a new departure on the part of the Barnet guardians, as they have always considered it part of their public duty to afford nursing care to those who cannot afford to have it in their own homes, and who are unable to obtain admission to hospitals supported by voluntary contributions or to pay the fees of nursing homes. The paying part of the hospital will be administered in accord with the code of regulations drawn up by the Ministry of Health. The hospital is situated on high ground, is quite in the country, and has charming views. The wards are large and airy, and the only difficulty may be the question in the troublous times of securing adequate warmth for the inmates. Lord Hampden, who expressed the pleasure it gave him to be associated with the institution, recalled the fact that in August, 1917, he had to appear in the hospital before a medical board to be certified fit to return to France. He went on to say that he had lately read some interesting details as to American hospitals. The Americans look to private patients as their principal source of revenue. They obtain subscriptions from their trade unions which cover the cost of those members who enter hospitals as patients, and they get subscriptions from the local authorities for those who are unable to pay for themselves. He suggested that the same scheme might be adopted at Barnet."

DENTISTRY IN A STATE HOSPITAL

The one great factor in the practice of dentistry in the charitable institutions, says Dr. Kent K. Kelley, of the Alton State Hospital of Illinois, is to conserve as much tooth structure as possible. It must be carried out farther in this work than in private practice, because, first, many patients cannot wear artificial restorations, or their mouths are in such bad condition from pyorrhea or abscesses that it would be impossible to make a restoration that would give satisfaction, and second, many of the inmates cannot afford to have extensive bridge work done, and it would be impossible for the state to finance it. Dr. Kent finds that almost 60 per cent of the patients in his hospital have been transferred from other institutions, yet a dental examination reveals the fact that their mouths are in a very bad condition. To elevate the standard of dentistry in charitable institutions, he feels that the dental department must have the hearty cooperation of the medical staff, as well as the cooperation of the dentists of the various hospitals.

"The question of temperaments is almost entirely unstudied for any practical purpose except by medical men. And some patients are thought to suffer much less, some much more, than they really do. I have known a Celt rouse the whole hospital because his toes were cold. While, if an Anglo-Saxon said his back was cold, he was generally within twenty-four hours of death."—Florence Nightingale.

Adv. page 58

LETTERS TO THE EDITOR

WHY NOT A DEMOCRATIC HOSPITAL STAFF?

The question is being asked,—why the frequent change in the nursing personnel of our larger hospitals? Why do nurses wander like gypsies from hospital to hospital seemingly never satisfied to remain more than one year, or at best two? Is the fault with the nurses or with the hospitals?

It is probable, in some instances, that the fault is with the individual nurse, but it stands to reason that a whole profession would not develop, as the nursing profession seems to have done within the last eight or ten years, into a procession of tramps, if there were not something fundamentally wrong somewhere other than with the nurses themselves.

It is my humble opinion that the trouble lies in the unprogressiveness of our hospital management. Now, while the whole world is throwing off militarism, let our hospitals follow suit. Let them relegate to the dump heap of other army implements, the military ranking of their department heads and adopt instead a regime similar to that of our schools or of big business.

This would put the graduate nurses at the head of each department on an equal footing and remove them from the authority of the training school superintendent, or the superintendent of nurses as she is usually called.

In some hospitals, where they have been fortunate enough to secure as superintendent of nurses a woman of broad experience and large mind, this present arrangement does very well, but unfortunately the majority of training school superintendents are given more authority than they have a capacity for, as will be shown by a few instances that I call to mind.

One hospital had a splendid anesthetist, and some other institution offered her a better salary. The board of the hospital where she was employed was willing to give her the same salary as that offered by the other hospital and told the superintendent of nurses so, but she let the anesthetist go and afterward made this remark to me: "I was sorry to have let Miss Dash go. She was the best anesthetist we have ever had, but if she was given the salary she asked she would then be getting as much as I am, and of course, I could not have a nurse under me getting the same salary as I." And pray why not? Why should the anesthetist, or the dietitian, or the pharmacist, or the operating supervisor be under the training school superintendent? It stands to reason that they, having made a study of their particular branch of hospital work, know more about it than the training school superintendent, and are entitled to as much salary as she, if the financing board is willing to pay it.

In another instance, a superintendent having made rounds over the hospital, told me of a suggestion that one of the department supervisors had made to her. She admitted to me that the suggestion was good, but said she would not adopt it because she could not be taking suggestions from those under her. Now the Standard Oil Company and other big businesses have a system by which they solicit suggestions from their employes; these suggestions are carefully considered and any feasible ones are not only commended but rewarded. Now if such a system redounds to the success of an institution like the Standard Oil Company, whose business is only a question of dollars and cents, why should a superintendent of nurses be so little as to ignore a suggestion that would further the good of an institution whose business is a question of human lives?

Under like supervision, the graduate head of a department feels cramped, becomes dissatisfied and ultimately joins the procession of shifting nurses, ever hoping to find that place where her initiative will be recognized and appreciated.

The superintendent of a hospital should be a well paid man with training and experience that is willing to devote his whole time to the work. The training school superintendent should have authority over her pupil nurses alone, and along with the head of every other department be responsible directly to the hospital superintendent.

The work of hospital departments overlap a great deal, and this would require cooperation on the part of each department head. This cooperation could be furthered by meetings, fortnightly or monthly, such as are held by college faculties, the superintendent of the hospital presiding, all department heads meeting on equal footing, a free exchange of ideas being encouraged, all complaints registered and settled, constructive criticisms made, and anything else that would pertain to the general welfare of the institution taken up. Such details as the employment of orderlies and maids could be discussed at these meetings.

When the graduate nurse, as the head of a department, is given a chance to expand, to put into her department her own ideas and experiences and to feel direct responsibility for its development, then will she become so interested and satisfied that the hospital will be able to retain her services for a long period of time. This will be of great benefit to the hospital and to the patient for whose comfort hospitals are maintained. The world fought for democracy, why not let us have a democratic hospital staff?—Anna L. Smith, R.N.

"In general, patients who are really ill do not want to talk about themselves. The 'nervous case,' on the other hand, delights in figuring to nurses and others a fictitious danger."—Florence Nightingale.

Adv. page 60